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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 1995



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'RYNKI ZAGRANICZNE' ON SOVIET CRUDE DELIVERIES TO CEMA NOTED

Warsaw RYNKI ZAGRANICZNE in Polish No 34, 19 Mar 80 p 2

[Text] From data which have already been published, the volume of this year's deliveries of Soviet crude oil to the European countries of the socialist communist will approximate the level of a year ago. Altogether, the five states--Poland, CSSR, GDR, Bulgaria and Hungary (excluding Romania, which only recently has been importing small quantities of the Soviet raw material and also on other bases than the mentioned countries) will import over 70 million tons of crude in 1980.

As far as prices are concerned, in accordance with the "creeping" base principle (price for a given year is established on the basis of average quotations on world markets in the past 5 years) applied in CEMA, they will be somewhat higher this year than last year. Considering, however, the stiff increase in the prices of crude oil on the international market resulting from the hikes made by OPEC, the difference between the price of the Soviet raw material delivered to the CEMA countries and that received by the USSR from Western consumers (corresponding to the world average) will undergo an increase to the advantage of the importers from the socialist community.

Data published in the GDR indicate that this country, which in 1979 imported 18.5 million tons of Soviet crude oil, covering with that approximately 90 percent of its consumption, can obtain 19 million tons this year. The deliveries up to the middle of the present decade are also supposed to be maintained on a similar level. According to these same sources, in the past year the GDR was paying approximately 40 percent less for the Soviet raw material than the world average during that time.

The newspaper RUDE PRAVO published similar information with regard to the prices paid by Czechoslovakia for crude purchased from the Soviet Union. The price for 1 ton of the Soviet raw material last year amounted to 69 transferable rubles. The amount due [the debt] was settled mainly by deliveries of machinery and equipment; they were partly connected with the clearing agreements between these two countries in the way of a credit granted by Czechoslovakia for the development of the exploitation of Soviet oil-bearing reserves. This year the deliveries of the raw material from the USSR to the Czechoslovak market will be higher by 5 percent than last year's and will reach 19.2 million tons.

This year's deliveries for Poland, according to the recently concluded contract, amount to 13.1 million tons of crude (which is supposed to correspond to approximately 79 percent of Poland's global import of that item) and 2.8 million tons of petroleum products. In the past year, the imports of Soviet crude amounted to 12.9 million tons and its prices were approximately one-third lower than the world average. This year's deliveries consist of sales ensuing from the long-term agreement as well as an additional 1.1 million tons comprising compensation for Poland's participation in the construction of the Surgut pipeline.

The Soviet side, in exchange for the contribution of the Polish enterprises to the construction of the 300-kilometer portion of the petroleum pipeline in the USSR, committed itself for a 20-year period to supply approximately 1 million tons of crude oil and also certain quantities of natural gas annually. At present, the work forces of our construction enterprises, headed by the Warsaw ENERGOPOL (laying the pipeline), are participating in the construction of the western section, from Andreapol to Novopolotsk. That entire investment is regarded as one of the largest of that kind in the world. The length of the Surgut crude pipeline exceeds 3,000 kilometers.

In view of increased requirements, since this year's consumption of liquid fuels in our country is estimated at approximately 18.5 million tons, Poland intends to purchase approximately 3.5 million tons of crude from other sources, mainly from the OPEC countries.

Bulgaria is buying a similar quantity--approximately 13 million tons--from the USSR this year. Hungary, according to MTI agency data, will import 7.5 million tons of Soviet crude oil this year (against 7.3 million tons in 1979) and also 2.5 million tons of petroleum products.

It is understandable that all CEMA countries which normally do not have oil-bearing deposits (excluding Romania), would wish to purchase larger quantities of the raw material from the USSR, especially in view of the limited possibilities for increasing the imports of more expensive crude from other sources. However, this is not possible in light of the serious problems which make the rapid increase in extraction in the USSR difficult. The uneven location of oil-bearing resources, with a marked concentration in regions outside of Europe, should be recognized as the main cause. This creates a considerable number of veritable difficulties, beginning with the question of guaranteeing a suitable work force all the way to the difficult climatic conditions and up to the high costs of extraction and transport. The traditional deposits in the European part, where the consumption of energy is the highest, are gradually being exhausted.

This year's production of crude oil, in accordance with the plan, is supposed to reach 606 million tons. However, last year's extraction, which amounted to 586 million tons, turned out to be de facto 7 million tons less than the plan assumptions.

BRIEFS

ANIMAL HUSBANDRY DEVELOPMENT--Tirana, February 20 (ATA)--Alongside the development of agriculture, husbandry, too, has developed intensively in Albania. While prior to liberation Albania had an entirely backward husbandry, after the liberation of the country an allround work began for the elimination of backwardness in this important sector of the economy on the basis of the instructions of the party that "there cannot be an advanced intensive agriculture without a developed husbandry." Over the years of the people's power the number of farm animals has kept increasing from year to year. Today, in the agricultural enterprises the income from livestock account for 35 percent of the total income for 100 hectares of land in the state sector. The phenomenon of the increase of the number of farm animals is witnessed in the cooperativist sector as well. During this period, alongside the increase of the number of the farm animals, the production of meat, milk and other diary products have kept increasing. Thus, in 1978 as against 1938, the production of meat increased 2.2 times and that of milk 3.1 times. In 1979 as against 1978 the production of meat and milk was 10 percent larger. [Text] [AU201044 Tirana ATA in English 0915 GMT 20 Feb 80 AU]

BITUMINOUS SHALE PROCESSING PLANT--Following research carried out since 1976 in laboratories and later on in a pilot plant, specialists in Fier District managed to extract approximately 80 percent high-grade bitumen from bituminous shale. As a result of this success, oil industry specialists, in cooperation with plants throughout the country, are now building a new industrial plant, the first of its kind to be designed and built in the country by their own efforts. The future plant will process 100 tons of bituminous shale daily. In addition, a silicate brick factory will also be built nearby, which will use the shale left over after the extraction of bitumen. Since bituminous shale deposits are also to be found in large quantities in Vlore District, a similar and even larger plant will be built in that district. [Tirana Domestic Service in Albanian 1700 GMT 14 Mar 80 AU]

CSO: 2020

BULGARIA

INDUSTRIAL PRODUCTION PLAN FOR JANUARY FULFILLED

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 20 Feb 80 p 4

[Report: "The Industry of the Bulgarian People's Republic in January 1980"]

[Text] The plan for overall industrial output for January 1980 was fulfilled. Compared with January 1979 output rose 2.6 percent.

The production of some basic industrial commodities was as follows:

	<u>Measure</u>	<u>January 1980 output</u>	<u>January 1980 in percent of January 1979</u>
Electric power	million kw hours	3400	108.6
Coal	thousand tons	2371	108.4
Briquettes	" "	111	114.8
Electrical instruments	thousands	27	136.2
Lathes	pieces	792	137.5
Electric hoists	"	9950	96.6
Tractors	"	672	127.3
Forklift Trucks	"	4681	166.8
Television Sets	"	7007	192.9
Calcinated Soda	Thousand tons	119	105.8
Pine wood and other wood tiles	Thousand cubic meters	23	103.3
Paper	Thousand tons	26	99.4
Cardboard	Tons	4723	105.2
Pane Glass	Thousand Square meters	2399	134.3
Household glassware	Thousand leva	2223	152.7
Porcelain tiles	Thousands	19361	141.8
Household porcelainware	Thousand leva	3047	112.1
Woolen fabrics	Million meters	3.0	104.6
Knitted clothing--upper	Million pieces	2.8	100.2
Garments	Million leva	21.7	99.4
Meat	Thousand tons	31.1	97.5
Butter	" "	1.5	101.0
Cheese	" "	4.9	110.2

Committee for a Unified System for Social Information

Comment

The results of the fulfillment of the plan in industry for the first 40 days of the final year of the Seventh Five-Year Plan are known. They indicate that in 1980 the production of a number of particularly important goods such as electric power, coal, rolled ferrous metals, steel pipes, electric motors, lathes, tractors, trains, electric hoists, forklift trucks, polyvinyl chloride, nitrogen fertilizers, polyethylene, chemical fibers and fabrics, cotton and silk fabrics, knitted underwear, clothing, meat, vegetable table oils, cheeses, and so on, was undertaken in amounts higher than planned. Bearing in mind that these commodities account for a considerable percentage of the basic material balances of the country, the overfulfillment of the plan for their output creates conditions for rhythmical work in many units and for exports and supplying the population with basic foodstuffs and durable goods.

At the same time, however, the results indicate that a substantial part of subunits and economic organizations are not displaying sufficient flexibility and persistence in reorganizing the work in the spirit and the requirements of the new economic approach. This applies to rhythm, above all. Nearly one-half (46.4 percent) of the output was produced in the last 10 days of January, only 25.4 percent of the monthly output was produced in the first 10 days. This slows down the marketing of the goods which is now the base for the formation of the general income, the funds of subunits and economic organizations, and the resulting wage fund.

Contractual obligations to supply raw and other materials on a cooperative basis continue to be violated. This is largely due to the existing practice of specifying the required delivery amounts on a quarterly basis as the result of which such deliveries are not met in the last days of the month.

A number of subunits are not showing sufficient concern for the maintenance of machines and equipment on a high technical level as the result of which they idle frequently as the result of technical breakdowns.

Such weaknesses in the organization of the work lead to the non-fulfillment of plans by a number of subunits and economic organizations. Thus, for example, the January plan for the production of internal combustion engines, combined machines, trucks, Skoda rear-end bridges, cement, pressed wood tiles, cellulose, and other, was not fulfilled.

In order to implement the first quarterly plan for all indicators and to have no stragglers, everywhere the process of application of the new economic approach must be accelerated. The rhythmical nature of output and implementation of contractual obligations must be proved. Greater concern should be displayed for the fast shipping of the produced goods and the timely income of payments from sales. This is an important prerequisite for the fulfillment of the planned assignments.

DEPUTY MINISTER DWELLS ON COAL DEPOSITS IN DOBRUDZHA

Sofia OTECHESTVEN FRONT in Bulgarian 22 Feb 80 p 1

[Interview with Vasil Zanchev, first deputy minister of power supply, conducted by OTECHESTVEN FRONT correspondent Boris Andrekov: "The Dobrudzha Coal Deposit"]

[Text] In her letter to the editors Temenuzhka Ivanova from Pleven would like details on the status, prospects and significance of the new coal basin in Dobrudzha. "Under conditions governed by the intensifying world energy crisis," she writes, "coal deposits in that part of the country are of interest. It is said that they are high-caloric and very rich. . . "

[Question] Are such data accurate, Comrade Zanchev?

[Answer] Entirely. Studies conducted so far have proved the existence of over 1 billion tons of geological coal reserves with a minimum content of ash, sulfur, and other harmful admixtures. This makes the coal high-caloric--up to 6,580 kilocalories per kilogram and with very good cokeable qualities.

[Question] Actually, could you describe the Dobrudzha deposits?

[Answer] The initial discovery of the coal seams occurred in 1963. Later systematic geological surveys were undertaken in the area between Balchik and Kavarna. They proved the existence of 56 seams divided into three groups, but at high depths ranging from 1,300 to 2,000 meters below the surface. Several thick high pressure water-bearing strata are over them, one of which is as much as 400 meters thick. They turned the basin into an exceptionally complex project for study, development, and exploitation.

[Question] How will such difficulties be surmounted?

[Answer] Available practical experience in the exploitation of coal basins throughout the world indicates that the Dobrudzha deposits are unique, at least for the time being, in terms of structure and complexity and means of development. All this called seeking the assistance of other countries and, above all, the Soviet Union, which has rich experience in the development of complex coal deposits. A permanent work group was set up, consisting of Bulgarian and Soviet specialists, to coordinate the development of the deposits. Several joint work programs were adopted.

[Question] What do they stipulate?

[Answer] A set of scientific research and design developments leading to the drafting of a fuller geological report on the basin. The purpose is to make a detailed study of the type of technologies and means to be used in drilling vertical shafts, the elements to be used for propping the tunnels, the insulation of the water seams, etc. Contracts have been concluded between Bulgarian and Soviet departments and institutes for the fulfillment of the programs.

[Question] What is being done at the present time?

[Answer] The plan for preliminary geological surveys of the eastern part of the deposits is being drafted. With the help of Soviet specialists, machines, and equipment, hydrodynamic and cost effectiveness studies are being done to determine the perimeters of some of the water-bearing layers with a view to eliminating their effect in the drilling of underground shafts and tunnels.

[Question] What Bulgarian departments, institutes, and enterprises are participating in such activities?

[Answer] The ministries of power supply and of metallurgy and mineral resources, the Tolbukhin okrug people's council, the Committee for Geology, Minproekt, Ministroy, the Bulgarian Academy of Sciences, and others. The Dobrudzha coal deposits, however, has drawn the attention of other countries as well. Following the consideration of some of its problems by the permanent commission on the coal industry of CEMA, Polish and Czechoslovak specialists offered their cooperation to determine specialized means for the drilling of shafts, designing underground insulations, and so on. Furthermore, we have established business relations with the British company RD-NCB Consultants, Ltd. which submitted an assessment covering geological and engineering data on the deposits.

On the basis of all studies conducted so far, the Council of Ministers Bureau issued an order calling for the acceleration of planning and design operations at the Dobrudzha coal deposits.

[Question] What are the more important assignments to be carried out in 1980 and in the next few years?

[Answer] The tectonic structure of the basin must be determined in order to be able to select the most suitable and, at the same time, most effective mining-extraction system. We shall undertake the experimental sealing of the water seams in order to determine the most successful means for drilling and propping vertical shafts and horizontal tunnels. One of the basic tasks will be the adoption of technically accurate solutions for the elimination of gas-dynamic factors which might cause eventual accidents as a result of self-ignition, the explosion of methane gas, earth slides, and so on. Seismic studies will be carried out as well within compressed periods of time.

[Question] Have the benefits to the national economy been assessed as a result of the development of the coal basin?

[Answer] Not fully at this point. Preliminary data, however, indicate that, being the biggest in our country, it will be highly effective and, in terms of economic advantages, would be the equivalent of all coal deposits in our country put together. This will be due, above all, to the rich deposits of high-quality coal which represents a valuable national resource.

[Question] When will regular operations begin?

[Answer] In some 10 to 15 years, probably, after all problems have been clarified and resolved. Some readers may find this term excessively long. However, its length is demanded by the complex conditions which must be mastered by the science of mining. A large number of unknowns remain.

[Question] In which economic sectors will the Dobrudzha coal be used?

[Answer] Mainly metallurgy and power industry and, eventually, as a chemical industry raw material, as well as in other national economic sectors.

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CSO: 2200

EDITORIAL URGES MORE CARE IN CAPITAL INVESTMENTS

Prague RUDE PRAVO in Czech 6 Mar 80 p 1

[Editorial: "Efficient Investment"]

[Text] The preparation and implementation of capital projects must be carried out by all levels of management with great responsibility. Every decision to embark on a capital project must be carefully weighed to ensure that the planned objective will be fulfilled because the expenditure of each single crown counts. These words from the 14th CPCZ Central Committee Presidium report were addressed, as was emphasized, especially to management workers of state organs, chairmen of national committees of all levels, general managements and managements of individual enterprises.

Capital investment policy is among the most important and at the same time difficult areas in achieving economic progress. Converting the findings of technical progress into actual new construction and production machinery whose output must meet future expectations is no easy task even for experienced workers. This underlines the key importance of responsible decision-making when modernization, reconstruction and especially new construction is being considered. Whenever anybody fails to take into account the overall impact even only for a little while our entire society is the loser.

The requirement that decisions on capital investments must be carefully weighed has been stressed many times before but is especially urgent now when some consequences of bad decisions have become plainly evident. Among the most glaring symptoms is the great number of uncompleted projects which on a per capita basis places us near the bottom [of the list of countries] on the European continent. Compared to the final years of the preceding five-year period, in the Sixth Five-Year Plan average project construction time should be reduced by 15 to 18 percent to make a beginning in construction time standardization to ultimately reduce these times to their respective world levels.

In the last year of the five year plan it has become obvious that this would not succeed because the number of uncompleted projects have further increased. Therefore, a stronger remedy will have to be found; this year the number of new planned construction starts was reduced by one fifth over

the original intention with the stipulation to accelerate the completion of projects under construction and increase deliveries to new projects. In addition, wage incentives were introduced to intensify the impact of this measure.

To solve a problem the root causes must be attacked. The dynamic development of the economy has called for ever greater capital investments to maintain the fast pace and provide adequate resources. But in the endeavor to open up new resources in many cases the recommendation by party organs to weigh every new capital investment decision carefully was not heeded even though the 15th CPCZ Congress cautioned specifically that we did not possess the means for all the construction we would like to see completed in a short time and that primary emphasis must be placed on the modernization and reconstruction of means of production.

In spite of these clear instructions investors kept proposing additional new construction projects. Often local patriotic interests of communities, cities, okreses and krajs or personal ties between decision-making partners prevailed. But even the stand of higher organs is sometimes not resolute enough to prevent inefficient construction projects and construction companies frequently are willing to build unplanned housing for engineering enterprises which in return supply them with equipment which the construction companies need. The common denominator of all such phenomena is lack of discipline and disregard of the public interest. Therefore, if the situation is to be remedied a start has to be made here.

Reduction in the number of construction starts--a principle which obviously will have to be observed also in the coming years--will force investors to weigh carefully which projects deserve priority. At the same time the number of poorly prepared construction projects will also have to be reduced. According to regular annual reviews at least every fourth capital project, which the investors are trying to include in the plan, is poorly prepared and requires at least another year of intensive preparation.

The resolution of the central authorities instructs all enterprises up to the level of ministries, which are responsible for the preparation of capital proposals, to improve the quality of preparatory work and set much stricter criteria. The authorities responsible for the development of production must take into account that everywhere in the world existing production capacities allow for considerable innovation without the need of great capital investments and at the same time keep in mind that the principal objective of capital investments is not only the achievement of a more advanced technical standard and higher productivity in the future but also the fast repayment of invested means and a maximum gain in the national income. These conditions can be met primarily only when investments are limited to capital projects involving the introduction of new advanced technology such as the modernization taking place in the textile industry where new modern machinery and other equipment of guaranteed operational reliability is being installed in existing premises or the

complete overhaul of some textile mills whose old buildings were partially rebuilt to meet the requirements of the new technology and organization of production. The example of the Nachod Tepna enterprise demonstrates that even in that case the construction expenditures did not exceed one fifth of the overall cost of the capital project.

These examples prove that production can be increased frequently without the need of new buildings and additional labor. Available cotton industry data demonstrate that the value and volume of production steadily increases while the number of workers employed in production is steadily decreasing. Aside from the high degree of mechanization this is due mainly to the well thought out investment policy which relies consistently on advanced technology. Nozzle and gripper looms, machines for nonwoven fabrics, continuous weaving or knitweaving, spindleless ring spinning frames--all these are machines developed in a planned manner in textile institutes and institutions. They are designed to modernize the production base and are also utilized fully in multishift operations.

In arriving at decisions on the need of construction of new production space the potential of shift work operation must play a much weightier role than hitherto. The important finding that modernization of equipment mostly raises the potential for shift work operation in contrast to new construction which usually reduces it presents adequate proof which must not be ignored. The ample shift work reserves of economic production units such as Masny prumysl [Meat Industry Enterprises], Aero, CKD or the Zavody automatizacni and vypočetni techniky [Automation and Computer Technology Enterprises] which do not even reach the 1.20 shift work coefficient or of the Brno Chepos enterprises which exceed it only by little, or finally also of the Plzen Skoda Works which is also considerably below the Czechoslovak average, which in itself is quite unsatisfactory, must not be overlooked.

The decision on the need to build new production halls must not be left to the wishes of the managers as has often been the case. There are better solutions like those of able and responsible workers who do not have only the narrow interests of their own enterprise in mind but respect the best public interest. Prefa Enterprises in the East Bohemia kraj, which produces parts for prefabricated housing, could also have its premises considered inadequate for the task facing it. All Prefa production units were producing a total of 3300 apartment units a year. Changing the management method, rearranging the production lines, discontinuing some unsuitable products and working in three shifts resulted in an output increase of 4600 apartment units. Simultaneously, the originally planned indicators were raised considerably even though the enterprises were built many years ago and are definitely not among the most modern. In this way a saving of around 230 million crowns was achieved in capital expenditures which otherwise would have had to be spent on an additional production capacity for the production of prefabricated parts for 1300 apartments.

The 14th CPCZ Central Committee Plenum has emphasized the necessity of weighing the decision on every new construction project much more carefully to make capital investment more cost effective. The decision-making process must be more responsible and professional. We cannot afford to build castles in the air, figuratively speaking, live in this respect beyond our means or our potential. Therefore, responsibility for capital investment must be subject to material penalties where what is planned is not produced or where unneeded production capacity results. In this respect planning organs and responsible ministries must fulfill their mission more responsibly. Improving the quality of capital construction and accelerating it cannot be achieved by the arbitrary methods which many investors have pursued over the years when they were violating the key criterion governing new capital construction which can be none other than best public interest.

8664

CSO: 2400

KHOZRASCHET MANAGEMENT, INCENTIVES STRESSED

Prague HOSPODARSKE NOVINY in Czech 15 Feb 80 pp 8-9

[Article by Docent Engr Bohuslav Fires, CSc, and Docent Engr Stanislav Svoboda, CSc, College of Economics, Prague: "Intraenterprise Khozraschet -- New Quality of Problems"]

[Text] Due to the transition to the intensive economic development, some questions of intraenterprise khozraschet appear in a new, completely different light. It has become evident that it is necessary to elaborate the intraenterprise organization, to lay greater emphasis, on useful properties of products, to strengthen khozraschet in the preproduction stages. How are we to proceed? What should we avoid?

The questions of intraenterprise management under the conditions of intensive development of socialist economy cannot be judged independently of the principles of khozraschet. Their most rational concept is based on the presumption that the essence of khozraschet is derived from the objective economic position of the real economic system which determines also the corresponding method of management.

The khozraschet status of the state socialist enterprise reflects the place of the real economic system within the exclusive social ownership of the means of production at the given stage of development of productive forces and social division of labor. To this corresponds also the method of management of its economy which induces the enterprise to discipline and initiative in the effective utilization of economic means and resources entrusted to it by the society for administration.

The intraenterprise khozraschet represents a creative application of this approach to the area of rational control of activity of individual parts of the intraenterprise structure and their interrelationships for the effective fulfillment of enterprise tasks and goals.

It is based on:

-- demarcation of the economic position of intraenterprise departments as the structural elements of the enterprise system;

-- and to this objective position corresponding method of stimulating and controlling the activity of intraenterprise departments.

The structural basis of intraenterprise management as a whole are the intraenterprise departments as functionally specialized parts of the enterprise system whose activities are uniformly coordinated, but which enjoy some measure of autonomy at the same time. The intraenterprise departments are as structural elements integrated in the process of interaction and cooperation into a well-rounded and unified system.

The intraenterprise departments qualitatively differ from the enterprise system by their economic position: they do not have a closed reproduction process and circulation of funds corresponding to it, and therefore lack economic khozraschet autonomy. On the other hand, the intraenterprise departments at all levels in a way (differently) participate in the implementation of the economic position of the state socialist enterprise as a whole depending upon the number and importance of functions which they perform and this requires a different quality of their activity. This activity, however, is always subordinated to the implementation of the enterprise goals.

The method of intraenterprise khozraschet and its goals can be rationally derived only from the essence, namely from the objective position of intraenterprise departments. A mere instrumental concept of the method of intraenterprise khozraschet would detach it from its inner substance and render it meaningless.

The intraenterprise khozraschet cannot exclusively aim at the utilization of value interrelationships in intraenterprise management. It is namely not effective outside the material aspect of reproduction of useful values or outside planned management and independently of the plan. In other words, it performs all functions of the system of intraenterprise management. It cannot therefore be used outside intraenterprise management. It represents a concrete form of its existence and functioning under the conditions, when the enterprise as a whole enters the socialist commodity-money relations.

Theoretical Definition of Problems

The fundamental characteristics of relations between the intraenterprise khozraschet and enterprise khozraschet originate in the principle of deriving the nature of the method of intraenterprise khozraschet from the objective position and functions of intraenterprise departments. The purpose of every intraenterprise department is to participate in the implementation of enterprise goals. Usually, of course, the entire intraenterprise structure cannot be effectively controlled from one place. For the top enterprise management, the intraenterprise departments appear as those elements of the structure whose activity cannot be controlled in detail by the top enterprise management, but whose initiative can be controlled -- both as to the content and methodology -- by the

differentiated input impulses and required output parameters acceptable to the enterprise as a whole.

The dialectics of the relationship between the individual intraenterprise departments and goals of the enterprise as a whole makes it unmistakably clear that the methodological procedures of intraenterprise khozraschet cannot be mechanically derived from the methods of the enterprise as whole regardless of the qualitatively different economic position of intraenterprise departments; that the value tools of intraenterprise khozraschet cannot be made absolute and isolated; that the necessity of controlling primarily the material aspect of the reproduction process in the enterprise particularly during the production phase must not be underestimated; finally, that the criteria of activity of intraenterprise departments must be adequate and not too general in terms of the content and time interval.

The basic purpose of intraenterprise khozraschet is to participate in stimulating the interest in creating the conditions for the rational transformation of enterprise tasks into the intraenterprise structure by the differentiated distribution of authority and responsibilities.

While the enterprise khozraschet respects the internal motivation of the enterprise as a whole, the internal motivations of intraenterprise departments stem from their different position. This determinant underlies also the objective of intraenterprise khozraschet: to encourage, in a differentiated and specific way, economical and effective, socially desirable production of enterprise useful values.

The relations of the reproduction process of value and useful value under the conditions of socialist commodity production depend, to a significant extent, on the distinguishing level of the khozraschet vertical structure particularly in terms of responsibility. The lower is the position of a specific intraenterprise department in the hierarchy of the intraenterprise structure, the closer is the interrelationship of material and value aspects particularly during the production phase of the reproduction process. Among the value criteria, a systematic evaluation of performance of intraenterprise departments is of key importance.

The function of value criteria is defined by the content of value relations within the enterprise. The application of value forms not corresponding the unsubstantiated nature of ties of the intraenterprise structure, including an inadequate principle of evaluation, would lead to the formalism of intraenterprise khozraschet, to establishing fictitious relations between intraenterprise departments and would guide the activity of intraenterprise departments often in the direction which would not be acceptable from the standpoint of enterprise goals. Decisive for the effective use of value forms in the intraenterprise khozraschet is their derivation from the decision-making responsibility and authority of the department in question.

The limits of the use of value criteria in the intraenterprise khozraschet confirm that the intraenterprise khozraschet does not concern value management alone. The rationality of the intraenterprise khozraschet is based on the dialectic of the relation between value and useful value which has quite specific qualities on the enterprise level. The choice of proper criteria by means of which it is possible to formulate with reasonable precision the tasks of intraenterprise departments and the conditions for enforcing their discipline in the fulfillment of these tasks and for stimulating their initiative in setting, implementation and checks on the tasks pervades the entire process of khozraschet management.

The representation of intraenterprise processes in accordance with the presently used criteria reflects the narrowing of the gap between the material and value aspects of the reproduction process within the enterprise more clearly than the representation of all-enterprise and national economic processes. Apart from the value criteria, the material criteria and particularly the output, materials and capacity standards as well as various consumption limits are therefore of fundamental importance for the intra-enterprise khozraschet.

Structure of State Socialist Enterprise

One of the principal conditions of the general level and effectiveness of the intraenterprise khozraschet is a well-designed internal structure of the enterprise which conforms to the requirements of khozraschet management. Without creating certain structural and related organizational prerequisites it is namely impossible to consistently determine and enforce the responsibility of individual intraenterprise departments and other enterprise units, including the responsibility of management personnel in the first place, for the results of their work and to use material incentives tied to these results.

An elaborate intraenterprise organization and above all its main part, that is a reliable and precise demarcation of activities, authority and responsibility among the individual levels of management (organizational levels), individual departments and workers is from a certain standpoint the basis of the properly working intraenterprise khozraschet.

It underlies:

- the objectively necessary uniformity, certainty and organization of khozraschet management;
- the application of direct and indirect tools, respectively, for management of every organizational level within the enterprise;
- the application of material and value indicators for management of individual levels;

-- the content and method of assigning khozraschet tasks to individual levels and the entire process of so-called transformation of indicators according to individual levels of management;

-- the applied methods and forms and control of the fulfillment of khozraschet tasks, and the manner of evaluation of compliance or non-compliance with khozraschet; the possibility of discriminating between those departments and workers that operate successfully and those that lag behind. (A precise delimitation of the area of activities, authority and responsibility makes both possible and meaningful the determination, establishment and measurement of work consumption and output, and the determination of differences between them by intraenterprise departments);

-- the methods and forms of material incentives based on the acceptance and fulfillment of khozraschet tasks.

The organizational aspect of intraenterprise khozraschet thus essentially determines its economic aspect.

From the standpoint of contemporary conditions, it is therefore possible to regard as a key prerequisite of further development of intraenterprise khozraschet the systematic elaboration of intraenterprise organization particularly with reference to the precise distribution and demarcation of the field of activities, authority and responsibility of individual levels of management, individual departments and workers. This calls for systematic work on defining the areas of responsibility, activity and rights related to the exercise of every function in enterprise organizational and work regulations, including strict enforcement of the principle of "ultimate authority and responsibility", that is the designation of those departments and workers that bear the "final" responsibility for certain activities and make final decisions.

Improper Hierarchy

An analysis of organizational structures of a number of enterprises reveals many ambiguities in:

-- distribution of overall authority and responsibility among the individual levels of management;

--insuring a balance between authority and responsibilities of individual levels of management;

-- determination, depending upon specific conditions, of the optimum number of levels of management;

-- determination of the optimum area of management for individual levels of management;

-- generally inadequate definition of respective responsibilities within the organizational structures;

-- imbalance between the vertical and horizontal information and communication channels and flows, overestimation of vertical ties to the detriment of horizontal ties and the resulting shift of responsibility to the higher levels of management and overloading of personnel there;

-- imbalance between the specialization of departments and workers on the one hand and necessary cooperation in work on the comprehensive solution of problems on the other.

One of the serious problems is the excessive sheerness of organizational structures determined by the number of levels of management. In most organizations a five-level structure is applied in the linear management (general directorate -- enterprise -- plant -- division -- shop), but a four-level structure in some instances. The staff structures are mostly four-level (manager -- deputy manager -- head of the sector -- head of the department). Generally it is true that the system is the more operative, the more capable it is of assimilating progress and adapting itself to the changes in the environment -- in other words, the fewer hierarchical levels it contains. The excessive sheerness of structures results in the following negative consequences:

-- the possibilities of correct utilization of workers are restricted;

-- cadre and personnel work is deformed;

-- it generates an incorrect style of work on the part of management personnel;

-- flexibility of management is impaired;

-- it is the source of formulation of heterogeneous goals;

-- it restrains the information flow;

-- it broadens the possibilities for the rise of bureaucracy.

Determination of Areas of Management

Due to the increasingly demanding nature and complexity of tasks, the area of management should logically decrease in the direction of the higher levels of management. In practice, however, this principle is often grossly deformed. The largest area of management (as measured by the number of directly supervised workers) is under the authority of organizations' managers. In accordance with the linear hierarchy, they exercise authority over plant managers, their deputies and -- customarily or because of the organizational interventions by the supervisory organs -- also over the

departments of labor safety, special tasks, legal, organizational, auditing, quality control and other departments. On the other hand, the department heads supervise on the average the smallest number of workers. Among the deputy managers, the largest area is usually controlled by the economic deputy managers which is due to the specialization of departments that exactly duplicate the structure of supervisory organs.

The deformation of the area of management occurs mainly on the management level and particularly in the enterprise directorates. In the plants (with the high degree of delegated authority which, by their nature and personnel, come close to an enterprise directorate), the area of management gradually increases from the plant manager to the foreman of the shop in the proportion which can be regarded as correct. It seems that generally more rational structures are used at the lower levels of management (plants, divisions, shops) and less rational at the higher levels of management (enterprise directorates, general directorates), where the relation to the production process is less close and purposefulness of individual organizational units less obvious. The direct ties to the production process, precisely defined functions of the plant or shop essentially prevent structural deformations and setting-up of superfluous levels of management.

An analysis of the problems pertaining to the area of management reveals that its deformations are caused primarily by:

- decisions of supervisory organs which enumeratively determine the establishment of a specific department and its subordination (usually to the head of the organization);
- (hidden) exercise of functional management by the higher level, which is caused by the deformation of structures on this level, together with the tendency to "have a partner" in the enterprise. The deformation of the area of management of the supervisory organ (the situation is similar to that in the enterprise) namely forces the management personnel of this organ to refer a considerable number of cases to the heads of sectors and departments. The latter, naturally, want to communicate with that person who will speak their language: in other words, the workers in charge of price-setting with the workers in the price-setting department, the planners with the workers in the department of planning and so on according to technical specialization. This is essentially a functional management, although the organizational norms emphasize the principle of one responsible leading worker;
- improper system of remuneration. If for example, a manager wants to hire a qualified worker and remunerate him adequately, he must often set up a new unit at least in the category of a department.

Distribution of Authority and Responsibility

The solution of this problem constitutes the fundamental factor in effectiveness of the organizational structure. It significantly affects the measure of economy and efficiency with which the enterprise performs its tasks and functions. At the same time, this is the most difficult problem to be solved by organizational work because its solution is affected by a variety of factors (size of the enterprise, its layout, nature of production and assortment of products, qualification and general abilities of workers, actually used computers, systems and tools of management and so on).

The crux of the problem is to make a correct decision on which level of management possesses, under the specific conditions of the enterprise, the best conditions for decision-making in this or that area from the standpoint of fulfillment of tasks set for the enterprise as a whole.

Following are typical examples of the present difficulties:

-- the incorrect idea is advocated that the objectively necessary growth of enterprises and various forms of their integration (with their unquestionable advantages) together with the application of tighter organizational forms necessarily means always a concentration and centralization of decision-making at the higher levels of management;

-- responsibility is frequently delegated, duties and tasks of subordinated levels of management are emphasized, while the authority remains centralized. A situation thus arises in which authority is concentrated on one side and responsibility on the other;

-- as a result, functional management is strengthened, because the head of the department which is responsible for the development in a certain area, but does not possess necessary authority is forced to obtain illegally the funds which it needs and to exceed its authority;

-- these circumstances contribute to the excessive flow of information along the vertical lines and encourage tendencies to slant information in order to satisfy the supervisory workers;

-- the so-called "second managing centers" arise in the enterprises. It happens relatively often that a certain deputy manager significantly surpasses, by the scope of his decision-making authority comes close (and exceptionally even surpasses) the manager's decision-making authority. In this context, it is interesting that the economic deputy managers in our enterprises have, in relation to other deputy managers, a rather limited scope of decision-making authority;

-- actual management thus concentrates in the hands of a few executives who in fact are not able to independently weigh individual variants of the solution and fully depend on the work of their subordinates. Eventually, the tendency appears to shift the solution of problems to the higher organs or various commissions;

-- the possibilities of choice of variants of solution are thereby limited. Due to the considerable workload, the responsible workers often insist that only one solution with the arguments in its favor be submitted for their approval. Depending upon the quality of supporting arguments, they either accept or reject the proposed solution;

-- the incorrect distribution of decision-making authority restrains initiative, creates so-called information barriers (reflected for example in the fact that information is obtained by the departments and workers that do not have decision-making authority, but not conveyed to the workers who have it);

-- it generates alibism: the impossibility of exercising the decision-making authority in some instances causes the executive to dodge his decision-making authority responsibility by letting the conferences of managers approve his decision. If the decision is not successful, all participating in the conference feel corresponsable and the resulting impact is not sufficiently hard;

-- a number of practical problems arise in connection with the so-called comprehensive sectors. They are often established by accident (or deliberately) by a merger of two or more departments into one unit. As a result, the sheerness of organizational structures is increased (another level of management is set up) and complications arise in defining the field of activity for individual management levels;

-- unresolved problems of ties between individual departments and sectors or insufficient application of various tools designed to reduce these ties. Although the present organizational structures are essentially based on the highly specialized departments, the actual situation often is such that "everybody does everything".

We must add that shortcomings in the organizational structures and particularly the failure of successfully coping with their hierarchy easily become a factor in the deformation of management, the potential source of bureaucracy, nonutilization of people's abilities and knowledge; they cause overloading of information channels and so on. The organizational structure thus assumes features which are in sharp conflict with the requirements of modern, flexible management and its need to evaluate individual technical, production, economic as well as commercial questions comprehensively in terms of the system as a whole. The attempts to dodge this problem by referring it to various commissions or consultative organs generally fail or are confined to a group of a few enthusiastic workers in the comprehensive rationalization brigades.

Institution of Economic Centers

It is generally true that economic centers represent in our enterprises the basic organizational form of application of intraenterprise khozraschet,

the basic organizational cell of intraenterprise economic management. The organization along the line of economic centers thus creates sort of structural superstructure, essentially a single-purpose structural dimension which is formed with close ties to the basic multi-purpose organizational structure of the enterprise. The principal purpose of the organization along the line of economic centers is -- with the effective use of value tools of management -- to determine, strengthen and invoke the responsibility of departments and especially their heads for production costs and profits (or for the administration and utilization rate of assets allocated to the economic center) incurred or achieved in the respective enterprise unit; to intensify and strengthen intraenterprise economy control, and to strengthen and consolidate material incentives accordingly.

The organization along the line of economic centers should strengthen the overall function of the basic organizational enterprise structure and its general orientation to efficient production of useful values and best possible attainment of enterprise goals. On the other hand, however, the two structural arrangements may clash in various ways, when for example some activity within the basic organizational structure paralyzes the function of economic centers and vice versa: the incorrect exercise of economic centers' function may undermine or do harm to the achievement of goals set for the entire organizational enterprise structure.

Examples from the present practice:

-- the existence of relatively independent organizational arrangements of the enterprise -- the basic organizational structure of the enterprise on the one hand (sometimes called functional structure of enterprise management) and the structure along the line of economic centers (sometimes called "economic" structure) on the other hand. Each of them perform specific functions: it lends to a certain extent a double nature to the system of intraenterprise management and calls for thinking and action on the part of responsible leading workers actually in two structural categories. This fact must be taken into account in planning, decision-making, control, motivation and methodology of these activities in order to insure the necessary interlinking and identity of both structures.

Practical experiences from a number of our enterprises, however, show that frequently this is not so. Thus for example the managing (decision-making) levels of functional management, aimed in the enterprise at the needs of material (natural) management, make decisions which affect the economic results of other sectors (economic centers) as the basic elements of "economic" structure. Yet, the economic consequences of such decisions either are not established or cannot be precisely stated. Moreover, the economic results of economic centers are frequently evaluated by another higher level of management which did not make the decision in question.

Thus for instance in the technical division of the enterprise, there exist several management levels of material (natural) management, namely the

technical division of the enterprise, the division of technical preparation of production, the division of tools handling and the tool shop. For the needs of economic management, the first three are included in the economic center of enterprise administration, but the tool shop is part of the independent economic center of auxiliary production. However, the tool shop center is managed in such a way that any of the superior levels of material (functional) management makes decisions which ultimately affect the activities and economic results of the tool shop. Thus for example the technical deputy manager approves and technical preparation of production works out a technical change which results for example in the discontinuation of production already in process in the tool shop. This, of course, adversely affects the economic results of the economic center "tool shop" without the respective responsibilities being spelled out in the appropriate form.

This fact makes it practically impossible to evaluate the economic center "tool shop" on the basis of the economic result achieved by it and, in a more general form, to link the economic result to material incentives or to the application of sanctions. Last but not least, the formal function of the intraenterprise economic structure cannot be interlinked with intraenterprise economic management at all.

In some enterprises (particularly in the consumer industry), the "economic" structures are formed in such a way that individual economic centers are in one line side by side. They are interlinked only by horizontal ties (in the nature of modified supplier-customer relations). When they are set up, the principal emphasis is laid on the possibility of determining their costs and profits from the standpoint of the sector as a whole. In the complex of economic centers, there is no unit -- a center -- with the decision-making authority. The economic center "administration" is set up for the accounting-technical and calculation purposes only and virtually no importance is attached to it by management (this is indicated also by the fact that the economic deputy manager or the head of the department of the information system is put in charge of it by the enterprise manager).

Essentially, this represents an incorrect separation of both structures mentioned above from each other in which the actual process of management takes place in only one of them -- in the structure of functional management -- while the "economic" structure is only sort of addition to the basic organizational structure. Sometimes, particularly in the centers of non-production and distribution nature, the "economic" structure becomes too autonomous. The tendency toward the autonomization of economic centers manifests itself particularly in the effort to elevate the minor tasks of the center, stemming from its own existence, to higher, all-enterprise tasks and goals -- in other words, in the paralyzation of the basic function of enterprise management.

Examples from practice show that some of the present tools of management promote rather than suppress this tendency. Thus for example the supply

unit (center) -- within the experiment of intensification of invested funds and the premiums based on the relatively brief period of time (a quarter, but also a year) -- tries to maintain minimum inventories and not to supply necessary materials to production. Since the inventories are reduced only with great difficulties through the liquidation of unnecessary supplies (the so-called "sleepers" -- the slow-moving items), the required volume is achieved by the sale of needed items (some of which are in short supply) which will be difficult to procure in the future.

It frequently happens in the enterprises that the managers' decisions change in the final analysis the conditions which are set for the economic center by the plan. Changes in the assortment brought about by the interventions of the sales department, department of supplies or department of planning in the effort to achieve a better fulfillment of the plan are carried out by the production center which cannot oppose such interventions. The budgets of costs and revenues for the centers are drawn up quarterly with the breakdown by months, while production is detailed by 10-day periods and its interlinking with the monthly or quarterly budgets is not (and cannot) be guaranteed. Under these circumstances, the centers are essentially interested only in the fulfillment of the production plan, quality of products and to a certain extent also in savings on direct costs and in profits or in the overall economic result. Only exceptionally is this problem successfully solved in some efficiently managed enterprises (such as Svit Gottwaldov) by ingenious methodology and perfectly working system of interchangeable management of tasks.

These few examples already show that the general solution of the problems of desirable reconciliation of the basic organizational structure (or so-called structure of functional management) with the structure along the line of economic centers and unquestionable benefit resulting from the simultaneous existence of both structures is a very delicate matter to which neither theory nor practice has yet paid appropriate attention.

Motivation of Intraenterprise Departments

The motivation of intraenterprise department activities permeates the entire system of tools and methods of intraenterprise management, combines their individual functional aspects and fully reflects the structural and content features of economic position of intraenterprise departments in their complex horizontal, vertical and functional hierarchy. The inner motivation of intraenterprise departments and their noticeable and measurable activity need not be absolutely identical. The purpose of the system of principles of khozraschet incentives and responsibility is to be the tool of reciprocal regulation interlinking particularly those activities of intraenterprise departments which cannot be directly and uniformly controlled by the top enterprise management.

The system of khozraschet incentives and responsibility reflects also the relationship between the more or less directive method of assigning tasks to

the operating departments and the area in which the department can carry out their activities. The area of activity of intraenterprise departments is essentially the more limited, the lower is the position of a specific department in the organization of enterprise division of labor. For example production departments as typically operating units lay emphasis on the precise fulfillment of assigned tasks, while their initiative is limited to those factors which directly affect their operations.

Closely related to the motivation in intraenterprise khozraschet is also the nature of the economic result to be achieved by the intraenterprise departments. If the operating costs of the intraenterprise department consist only of the expenditures incurred in its activity and if its revenues are based on such evaluation of intraenterprise performance which reflects the recognition of the actual limits of authority and responsibility, then even the economic result represents an adequate tool of inner and external motivation. In the departments with a more extensive area for their own initiative the weight of khozraschet incentives is greater and more complex.

The time factor also is important for khozraschet incentives: the choice of the period for which the criteria of khozraschet incentives are evaluated should to a maximum possible degree eliminate the potential effect of accidental factors on the economic results achieved by the intraenterprise departments.

Important for complete khozraschet incentives in the intraenterprise management are also such stimuli which stress the solidarity of individual departments with the overall enterprise integration and with the fulfillment of its tasks and goals.

The economic rules in the system of intraenterprise management guide the intraenterprise departments to the fulfillment of planned tasks assigned to them by the enterprise management. They put at an advantage those departments which achieve better results than called for by the assigned tasks, stimulate department workers to spontaneous initiative in the effective fulfillment of tasks without administrative command. The basic criterion of their effectiveness is the effort to achieve a balance between the scope of authority, which a specific department has in the implementation of its own decisions, and the scope of responsibility which it bears for the implementation of these decisions. Apart from the directive quantities, the factors in indirect management play an important role and are unusually sensitive in their consequences. Among them in particular are:

- the factors positively stimulating the elements of moral and material incentives;
- the restricting factors, particularly the intraenterprise sanctions.

The positive factors should be the prevailing form of indirect incentives. The sanctions proved effective in practice only in the case of noncompliance with such indicators whose weight cannot be positively stated.

The most sensitive element in the intraenterprise khozraschet is the area of personal material incentives. It essentially determines how successfully the enterprise interest will be possible to bring into harmony with the interests of intraenterprise departments and through them also with the interests of the individuals. This problem represents an independent group of very specific questions. Undoubtedly, the forms of personal material incentives must stress the fulfillment of planned tasks assigned to each department and must enforce a differentiated remuneration and personal evaluation in accordance with the indicators which may be directly affected by the workers receiving premiums. The intraenterprise departments should have by the enterprise defined the area in which they could determine the forms and specific conditions of personal material incentives for their workers without being able to jeopardize the khozraschet intentions of the enterprise as a whole.

10501

CSO: 2400

WHEAT SELF-SUFFICIENCY PLANNED

Prague ZEMEDEL'SKE NOVINY in Czech 22 Feb 80 p 3

[Article by Eng. H. Hanzlova]

[Text] Our agricultural producers have a demanding task before them, which is to achieve self-sufficiency in the production of grains as rapidly as possible. This is essential because of both the internal and external conditions in which our economy is developing. Because of the limited amount of land available, the only way in which to meet this goal is to achieve a further increase in the yield per hectare, especially in winter wheat which is the decisive cereal grain.

Last week there was a discussion of the possibilities of increasing production and improving the properties of what at the cereal grain conference in Prague, which was attended by the CSR Ministry of Agriculture and Foodstuffs, the Czechoslovak Scientific-Technical Society, the Czech Central Committee of the Agricultural Society's specialized grain group Oseva, the Grain Research and Improvement Institute in Kromeriz, and Agroplan.

In the overall range of grains, wheat is currently grown on the most ground, averaging 47 percent in the past years of the Sixth Five-Year Plan. It is also our highest yielding grain and when that is not the case, according to Eng. J. Lekes, DrSc, director of the Grain Research and Improvement Institute in Kromeriz, it is a reflection of mistakes and deficiencies in the agricultural techniques. It is a matter of always properly maintaining the complex variety of cultivation technology. The introduction of a simplified agrobiological control has been a great help, providing a basis on which it is possible to ameliorate rapidly and effectively any unfavorable influences in the course of crop growth and development. One must respect the agrobiological properties of the individual crops, especially as far as the timing and method of nitrogen fertilizer application are concerned. The treating of crops with nitrogen has grown in importance in recent years. Late fertilizing with 20 to 30 kilograms of pure nutrients per unit is recommended, especially in wet areas and fields used every year where there is an accumulation of "bilkovin" by 1 percent and that of wet ?lime? content by about 3 percent.

Considerable attention was drawn by the speech by Eng. M. Suskevic, CSc, of the Basic Agricultural Techniques Research Institute in Hrusovany near Brno which dealt with utilization of minimal working of the soil for winter wheat. Grains and some other crops do not require plowed ground to be grown successfully and it is enough for the soil just to be loosened. This fact together with the growing level of fertilizing and plant protection is leading to the introduction of new technological procedures in working the ground. This is a significant change which under suitable conditions allows a reduction in the depth to which the ground is worked and combining operations or in some cases leads directly to sowing on ground which has not been worked or has been worked only on the surface. In the CSSR there are suitable ecological conditions for the introduction of this new technology on an area of 3,132,000 hectares, which is 64 percent of the arable land. Depending on the crop mixture and the number of special sowing machines available, by 1985 we should have 800,000 hectares planted in winter wheat, which amounts to approximately 70 percent of that crop. Besides relieving the high labor demands of autumn and a number of priority technical agricultural tasks, this will also contribute to fuel economies. The researchers calculate that the diesel fuel consumption will drop from 26 to 11 liters per hectare. This means that there would be an annual savings of 15 million liters of diesel fuel in the CSSR.

Growing wheat is not just a matter of the quantity of grain produced, but also of its quality. It is possible to meet the demands of the milling, baking, and feed industry from the standpoint of technological and nutritional value of the grain only if the grower uses all reserves in the areas of harvest storage, farming technology and territorial specialization of wheat production for effective utilization of the grain.

The report which was jointly prepared by Eng. V. Hyze, CSc., and Eng. S. Palik of the Grain Research and Improvement Institute in Kromeriz among other things familiarized those present with the principles of territorial specialization. The CSSR is divided into four areas based on a 50-year average temperature in the spring and summer growing period, the cumulative precipitation and the type of soil. For example, the most favorable area for growing wheat of good technological quality is found in most of the following okreses: Louny, Most, Chomutov, Teplice, Znojmo, Brno, Hodonin, Breclav, Vyskov, Uherske Hradiste, Bratislava, Trnava, Dunajska Streda, Komarno, Galanta, Nove Zamky, Nitra, Levice, Kosice, and Trebisov. Another area which is suitable for growing wheat for foodstuffs is found in parts of the following okreses: Usti nad Labem, Litomerice, Melnik, Kladno, Rakovnik, Karlovy Vary, Plzen-north and Plzen-south, Tachov, Beroun, Kolin, Pardubice, Trebic, Blansko, Prostějov, Kromeriz, Gottwaldov, Senica, Topolcany, Lucenec, and Michalovce. In the experts' view, the overwhelming majority of wheat for foodstuffs can be grown in the two above areas. The other two areas are mainly suitable for producing wheat for fodder. Further scientific-technical progress in this direction has determined, among other things, the economic value of agricultural workers and growers taking an interest in the quality of the grain.

Care and storage of the grain after harvesting also has a considerable effect on the quality of wheat. Details on this were given at the conference by Eng. B. Skopek of the State Inspector for Quality of Agricultural Products

in Prague. Among other things, he stated that we lose a lot because of the low technical level of the drying plants, exceeding the permitted temperatures when drying, and mixing portions with differing degrees of moisture when handling, treating, and storing. This, together with the changes in varieties toward the less valuable Yugoslav variety and Polish Grana at the expense of higher quality Soviet varieties of winter wheat, has a great deal to do with the fact that we are not able to meet the overall needs of the foodstuffs industry for high quality domestic grain. Even though it amounts to only approximately one-third of the overall wheat production, we must import part of it. A number of actions have been taken to improve this situation, directed for example at improving the quality of management and control of the quality of the wheat, forming the organizational and technical conditions for improving the quality in agricultural enterprises, and increasing the amount of indirect heating in drying plants. The new method of evaluating the wheat purchased and different prices depending on its technological value should also help.

6285

CSO: 2400

INNER-GERMAN TRADE RESULTS FOR 1979 ANALYZED

West Berlin DIW-WOCHENBERICHT in German Vol 47 No 9/10, 7 Mar 80 pp 105-109

[Analysis by German Institute for Economic Research, West Berlin: "Inner-German Trade 1979: Price Increases Conceal Decline of Trade Volume"]

[Text] At first glance the Federal Republic of Germany's 1979 trade with the GDR developed very well: Turnover rose by 9 percent, and the GDR deficit was smaller than it has been for years.¹ However, that increase in turnover was due not to rising deliveries and purchases but entirely to higher prices; adjusted by price transactions in fact suffered a decline.² The weak trend observed for some time past has therefore continued in 1979. After 1973 only a single year (1976) recorded a genuine increase in inner-German trade.

1979 Results

In 1979 turnover in inner-German trade rose by 9 percent to DM9.2 billion. That result is due entirely to a sharp rise in the last 4 months of the year. Turnover had actually stagnated through August. The favorable trade in recent months must, however, be considered against the comparable period of 1978. At that time the GDR, in particular, had greatly curtailed purchases.

1979 developments were also largely oriented to a balance adjustment: The Federal Republic's deliveries (at 4 percent) expanded far less than its purchases (14.5 percent). Until the end of September the flow of goods was in balance in terms of value. Only subsequently did the gap reopen at the expense of the GDR. Still, for the year as a whole this gap was far narrower than in previous years: In 1979 the GDR was able to meet 96 percent of its purchases by its own goods deliveries; in 1978 the import cover ratio in goods traffic amounted to only 86 percent. The GDR's accumulated trade deficit arising from the exchange of goods, the traffic in services and cash payments, continued to rise slightly. At the end of 1979 it amounted to DM3.9 billion.³

Table 1--Development of Inner-German Trade

(1) Jahr	(2) Einkäufe ¹⁾	(3) Lieferungen	(4) Umsatz	(5) Saldo	(6) Einkäufe ¹⁾	(7) Lieferungen	(8) Umsatz
	(6) in Mill. DM				(7) Zunahme in % gegenüber dem Vorjahr		
1965	1 260	1 206	2 467	- 54	.	.	.
1970	1 996	2 416	4 412	420	20,5	6,3	12,3
1971	2 319	2 499	4 817	180	16,2	3,4	9,2
1972	2 381	2 927	5 308	547	2,7	17,2	10,2
1973	2 660	2 998	5 658	339	11,7	2,4	6,6
1974	3 252	3 671	6 923	418	22,3	22,4	22,4
1975	3 342	3 922	7 264	579	2,8	6,8	4,9
1976	3 877	4 269	8 145	392	16,0	8,9	12,1
1977	3 960	4 343	8 304	383	2,2	1,7	1,9
1978	3 900	4 524	8 424	624	-1,5	4,2	1,4
1979	4 465	4 711	9 176	246	14,5	4,1	8,2

(8) 1) Der Bundesrepublik Deutschland einschließlich Berlin (West); einschließlich Lohnveredelung sowie Warenverkehr auf ausländische Rechnung.

(9) Quellen: Statistisches Bundesamt, Warenverkehr mit der Deutschen Demokratischen Republik und Berlin (Ost), Fachserie 6, Reihe 6 (Jahreshefte und Dezember 1979); Berechnungen des DIW.

Key:

1. Year
2. Purchases
3. Deliveries
4. Turnover
5. Balance
6. Million D-marks
7. Percentage increase by comparison to the previous year
8. Footnote: 1) Federal Republic of Germany including West Berlin; including commission processing and goods traffic on behalf of foreign countries.
9. Sources: Federal Office for Statistics, "Goods Traffic with the German Democratic Republic and East Berlin," Collection 6, Series 6 (annual statistics and December 1979 data); DIW computations.

Last year's results of inner-German trade were characterized mainly by price increases. We may ascertain the extent of the price rises by weighting the price indices for the Federal Republic's exports and imports by the goods structure of inner-German trade. Almost the same results are yielded by the respective computation on the basis of the Federal Republic's industrial producer prices.⁴ Our computations could be further checked out by virtue of the fact that data on the development of volumes and values are available for various goods and groups of goods.

For both deliveries and purchases this calculation yields a real decline of about 5 percent. Respecting the deliveries of the Federal Republic, the total price increase rate amounted to roughly 10 percent. The sharpest price

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rises occurred with regard to oil, silver, organic raw materials and chemicals. Oil supplied to the GDR in 1979, for example, cost 38 percent more than in the previous year; the price of silver rose by 58 percent; price increases of 23 percent were recorded for organic raw materials and chemicals. For the items listed above price-related additional receipts amounted to DM215 million.

Due to the differing goods structure the average price increases relating to purchases from the GDR amounted to 20 percent and were even greater than those relating to deliveries. Roughly two thirds of GDR additional receipts (DM370 million) were generated by the rise in the price of oil products; compared to the previous year such products purchased in the GDR (diesel oil, gasoline and heating fuel) were 62 percent more expensive.

The price element also changed the structure of deliveries and purchases. A more than proportionate increase was recorded for raw materials and production goods (including mining products). Currently deliveries in this sector account for slightly more than 50 percent, purchases for slightly less than 50 percent.

As to deliveries, the item mining (coal, oil) has now assumed notable dimensions (13 percent); within the scope of raw materials and production goods it has moved to second place. First place continues to be held by chemical products which largely depend on oil prices (21 percent). On the other hand, the percentage of investment goods has declined and now accounts for only about a fourth of all deliveries. In fact the completion in 1979 of some major projects contributed to an absolute reduction in deliveries.

Regarding purchases the rise in the percentage of oil products from 14 to 21 is particularly remarkable. In 1979 receipts from the sale of these products were double those arising from the sale of investment goods and nearly 7 times greater than those generated by the sale of machines. Declining in 1979 were purchases of consumer goods--especially textiles and clothing; purchases of agricultural and food products rose disproportionately little.

The GDR's Western Trade Plans

The economic plan for the current year clearly shows the dominant position of foreign trade; the plan data indicate cutbacks in the growth of imports and a substantial increase in exports for 1980.⁶ It is difficult to estimate how foreign trade relations are going to develop in terms of geographical distribution. No precise data are available for the intentions of the economic leadership; stray indications cannot yet be built up into an unequivocal composite:

- Concerning trade relations with the so-called capitalist industrial countries the economic plan says that they should be "expanded...in a balanced manner," that "greater flexibility and efficiency (must) be guaranteed in foreign trade transactions," that it will be necessary "substantially to raise the production and offer of profitable export goods which

Table 2--Deliveries by the Federal Republic of Germany in Inner-German Trade
by Groups of Goods

(1) Erzeugnisgruppen bzw. Erzeugnisse	1978	1979	(2) Veränderung 1979 gegenüber dem Vorjahr		(3) Struktur	
			(4) in Mill. DM	(5) in %	1978	1979
					in %	
6 Erzeugnisse der Grundstoff- und Produktionsgüterindustrien ²⁾	2 249	2 551	+ 302	+ 13,4	49,7	54,1
7 dar.: Bergbauliche Erzeugnisse	373	617	+ 244	+ 65,4	8,2	13,1
8 Kohle, Koks	118	256	+ 138	+ 116,7	2,6	5,4
9 Erdöl, Erdgas	245	349	+ 104	+ 42,6	5,4	7,4
10 Eisen und Stahl ³⁾	453	428	- 25	- 5,5	10,0	9,1
11 NE-Metalle ⁴⁾	335	338	+ 3	+ 0,9	7,4	7,2
12 Silber	116	176	+ 60	+ 52,0	2,6	3,7
13 Chemische Erzeugnisse ⁵⁾	920	998	+ 78	+ 8,5	20,3	21,4
14 Anorganische Grundstoffe ⁶⁾	173	164	- 9	- 5,3	3,8	3,5
15 Organische Grundstoffe ⁶⁾	218	294	+ 77	+ 35,2	4,8	6,2
16 Kunststoffe und synthetischer Kautschuk	121	148	+ 28	+ 22,8	2,7	3,1
17 Erzeugnisse der Investitionsgüterindustrien	1 403	1 235	- 168	- 12,0	31,0	26,2
18 dar.: Maschinenbauerzeugnisse	964	858	- 105	- 10,9	21,3	18,2
19 Maschinen der Metallbearbeitung ⁷⁾	259	243	- 16	- 6,1	5,7	5,2
20 Elektrotechnische Erzeugnisse	175	163	- 13	- 7,3	3,9	3,4
21 Erzeugnisse der Verbrauchsgüterindustrien	349	382	+ 33	+ 9,6	7,7	8,1
22 dar.: Textilien und Bekleidung	181	189	+ 8	+ 4,2	4,0	4,0
23 Erzeugnisse der Landwirtschaft ⁸⁾ und der Nahrungs- und Genußmittelindustrien	469	492	+ 23	+ 4,9	10,4	10,4
24 dar.: Rohe Öle	65	97	+ 32	+ 48,8	1,4	2,0
25 Ölkuchen und Schrote	112	131	+ 20	+ 17,7	2,5	2,8
26 Alle Erzeugnisse ⁹⁾	4 524	4 711	+ 187	+ 4,1	100,0	100,0

27) 1) Einschließlich Berlin (West).- 2) Einschließlich Bergbauerzeugnisse.- 3) Einschließlich Gießereierzeugnisse sowie Erzeugnisse der Kaltwalzwerke, Ziehereien und Stahlverformung.- 4) Einschließlich deren Halbzeug.- 5) Einschließlich Kunststoff-
erzeugnisse und Gumiwaren.- 6) Einschließlich Chemikalien.- 7) Und andere Maschinenbauerzeugnisse (Warengruppe 321 der In-
dustriesystematik); u.a. holzbe- und verarbeitende Maschinen, Gießereimaschinen, Prüfmaschinen.- 8) Einschließlich Jagd-,
Forstwirtschaft und Fischerei.- 9) Einschließlich nicht zuzuordnender Waren.
- Abweichungen in den Summen durch Runden der Zahlen -

28) Quellen: Statistisches Bundesamt, Warenverkehr mit der Deutschen Demokratischen Republik und Berlin (Ost), Fachserie 6,
Reihe 6 (Jahresheft 1978 und Dezember 1979); Berechnungen des DIW.

Key:

1. Product groups or products
 2. 1979 changes compared to previous year
 3. Structure
 4. Million D-marks
 5. Percentage
 6. Products of the raw material and production goods industries
 7. Including: Mining products
 8. Coal, coke
 9. Oil, natural gas
 10. Iron and steel
 11. Nonferrous metals
 12. Silver
 13. Chemical products
 14. Anorganic raw materials
 15. Organic raw materials
 16. Plastics and synthetic rubber
 17. Products of the investment goods industries
- [Key continued on following page]

18. Including: Machine construction products
19. Metal processing machines
20. Electrical engineering products
21. Products of the consumer goods industries
22. Including: Textiles and clothing
23. Products of agriculture, the essential and nonessential food industries
24. Including: Oils and fats
25. Oil cakes and bran
26. All products
27. Footnotes: 1) Including West Berlin.-- 2) Including mining products.
3) Including foundry products and products of cold rolling and steel drawing mills and steel forming.-- 4) Including semifinished products.-- 5) Including plastic and rubber products.-- 6) Including chemicals.-- 7) And other machine construction products (goods group 321 of the industrial classification system); such as wood processing machines, foundry machines, testing devices.-- 8) Including hunting, forestry and fishing.-- 9) Including unclassifiable goods.--Totals may differ due to the rounding off of figures.
28. Sources: Federal Office for Statistics, "Goods Traffic with the German Democratic Republic and East Berlin," Collection 6, Series 6 (1978 annual statistics and December 1979 data); DIW computations.

the highest quality standards," and that the "production assortments (must) consistently be geared to actual market conditions." The plan also calls for the "adoption of effective measures to conserve and replace imports."⁷

- At the Eleventh SED Central Committee Plenum general secretary Erich Honecker called for the raising of exports of high-quality products yielding appropriate profits in foreign exchange and for saving imports from the "nonsocialist economic area." He demanded a substantial improvement in the "structure of our exports especially to the nonsocialist economic area" and a speed-up in the rate of 1980 export increases compared to the previous year.⁸
- Also at the Eleventh Plenum the competent state secretary in the Ministry for Foreign Trade indicated the necessity for achieving an above average increase in "exports of products which yield the highest possible profits in foreign exchange." In order to do so, "the highest possible valuta prices" must be realized and "marketing improved by steadily rising skills." This would require a "new quality in foreign trade operations, especially selling." The state secretary described the "increase of exports to the nonsocialist economic area" as a "difficult task confronting foreign trade and industry." He continued by saying that the slogan issued by the supreme party leadership in February 1978, "purposefully to organize export production for the nonsocialist economic area continues to be of the utmost topicality."⁹

Table 3--Purchases by the Federal Republic of Germany in Inner-German Trade
by Groups of Goods

(1) Erzeugnisgruppen bzw. Erzeugnisse	1978	1979	(2) Veränderung 1979 gegenüber dem Vorjahr		(3) Struktur	
			(4) in Mill. DM	(5) in %	(4)	(5)
					1978	1979
(6) Erzeugnisse der Grundstoff- und Produktionsgüterindustrien ²⁾	1 666	2 212	+ 547	+ 32,8	42,7	49,6
(7) dar.: Rohbenzin und Kraftstoffe	551	958	+ 407	+ 73,7	14,1	21,5
(8) Eisen und Stahl ³⁾	254	312	+ 57	+ 22,5	6,5	7,0
(9) Walzstahl	179	214	+ 35	+ 19,6	4,6	4,5
(10) NE-Metalle ⁴⁾	148	167	+ 20	+ 13,4	3,8	3,7
(11) Chemische Erzeugnisse ⁵⁾	401	466	+ 65	+ 16,2	10,3	10,4
(12) Anorganische und Organische Grundstoffe ⁶⁾	150	191	+ 41	+ 27,5	3,8	3,3
13) Erzeugnisse der Investitionsgüterindustrien	410	453	+ 43	+ 10,5	10,5	10,1
14) dar.: Maschinenbauerzeugnisse	110	140	+ 31	+ 28,2	2,8	3,1
15) Elektrotechnische Erzeugnisse	169	165	- 4	- 2,4	4,3	3,7
16) Erzeugnisse der Verbrauchsgüterindustrien	1 214	1 161	- 52	- 4,3	31,1	26,0
17) dar.: Holzwaren	190	208	+ 17	+ 9,1	4,9	4,7
18) Möbel	153	168	+ 16	+ 10,2	3,9	3,8
19) Textilien	422	364	- 58	- 13,7	10,8	8,1
20) Meterware ⁷⁾	205	160	- 45	- 22,0	5,2	3,6
21) Wirk- und Strickwaren	170	164	- 6	- 3,7	4,4	3,7
22) Bekleidung	351	317	- 34	- 9,7	9,0	7,1
23) Oberbekleidung	211	188	- 23	- 11,0	5,4	4,2
24) Erzeugnisse der Landwirtschaft ⁸⁾ und der Nahrungs- und Genußmittelindustrien	582	607	+ 26	+ 4,4	14,9	13,6
25) dar.: Getreide	156	172	+ 16	+ 10,3	4,0	3,8
26) Schlachtvieh ⁹⁾	222	218	- 4	- 1,6	5,7	4,9
27) Zucker und Süßwaren	74	89	+ 15	+ 20,5	1,9	2,0
28) Alle Erzeugnisse ¹⁰⁾	3 900	4 465	+ 565	+ 14,5	100,0	100,0
29) 1) Einschließlich Berlin (West).- 2) Einschließlich Bergbauerzeugnisse.- 3) Einschließlich Gießereierzeugnisse sowie Erzeugnisse der Kaltwalzwerke, Ziehereien und Stahlverformung.- 4) Einschließlich deren Halbzeug.- 5) Einschließlich Kunststoff- erzeugnisse und Gummiwaren.- 6) Einschließlich Chemikalien.- 7) Einschließlich Heim- und Haustextilien.- 8) Einschließlich Jagd-, Forstwirtschaft und Fischerei.- 9) Für 1978 einschließlich Fleisch und Fleischwaren, für 1979 einschließlich frischem Schweinefleisch.- 10) Einschließlich nicht zuzuordnender Waren.- - Abweichungen in den Summen durch Runden der Zahlen-						
30) Quellen: Statistisches Bundesamt, Warenverkehr mit der Deutschen Demokratischen Republik und Berlin (Ost), Fachserie 6, Reihe 6 (Jahresheft 1978 und Dezember 1979); Berechnungen des DIW.						

Key:

1. Product groups or products
2. 1979 changes compared to previous year
3. Structure
4. Million D-marks
5. Percentage
6. Products of the raw material and production goods industries
7. Including: Crude gasoline and motor fuels
8. Iron and steel
9. Rolled steel
10. Nonferrous metals
11. Chemical products
12. Anorganic and organic raw materials
13. Products of the investment goods industries
14. Including: Machine construction products
15. Electrical engineering products

[Key continued on following page]

16. Products of the consumer goods industries
17. Including: Woodwares
18. Furniture
19. Textiles
20. Yard goods
21. Hosiery and knitwear
22. Clothing
23. Outer clothing
24. Products of agriculture and the essential and nonessential food industries
25. Including: Grain
26. Slaughter cattle
27. Sugar and candy
28. All products
29. Footnotes: 1) Including West Berlin.-- 2) Including mining products. 3) Including foundry products, products of cold rolling and drawing mills and steel forming.-- 4) Including semifinished goods.-- 5) Including plastic and rubber goods.-- 6) Including chemicals.-- 7) Including household textiles.-- 8) Including hunting, forestry and fishing.-- 9) For 1978 including meat and meat products, for 1979 including fresh pork.-- 10) Including nonclassifiable goods. -- Totals may differ due to the rounding off of figures.
30. Sources: Federal Office for Statistics, "Goods Traffic with the German Democratic Republic and East Berlin," Collection 6, Series 6 (1978 annual statistics and December 1979 data); DIW computations.

Lately a responsible spokesman of the Foreign Trade Ministry has stated that the GDR does not intend to neglect the Federal Republic when intensifying its trade relations with Western industrial countries. The GDR, he said, "is ready to raise the trade volume with the Federal Republic by more than 10 percent per annum."¹¹

Problems Regarding Delivery Capacity and Readiness to Purchase

This intention may well be quite serious; the question remains whether it will be possible to harmonize the wish with the capacity. So far, for example, the GDR has not succeeded in achieving genuine sales successes in the Federal Republic with those goods which generally represent the backbone of its export business¹²--machine construction products. On the contrary: The percentage of machines in total deliveries to the Federal Republic declined even further from a level which was never impressive. In 1979 it amounted to 3 percent, although GDR foreign traders made every effort precisely in this field to score in the "representative market" of the Federal Republic.

The GDR certainly has some delivery reserves with respect to the products of the raw material and production goods industries, the consumer goods industries, agriculture and the foodstuffs industry. There, though, it comes closer and closer to the limits of West German readiness to buy. Despite all assertions to the contrary, the West German side does not in all cases

enjoy total freedom of purchase in inner-German trade: Quota restrictions exist, for example, for 35 percent of the value of purchases of industrially produced goods¹³; excluding oil products the percentage is only 10, around DM450 million. Quota limitations concentrate on the sectors iron and steel, textiles and clothing. In the sector agriculture and food as many as 90 percent of the value of purchases carry value or volume quotas.¹⁴ To state that only 155 of the total of 900 items of goods are subject to restrictions conceals the fact that these 155 are products of crucial importance in inner-German trade.¹⁵

Up to now the Federal Republic has been unable to decide on a more liberal import policy vis-a-vis the GDR, not even the index-linking of quotas.¹⁶ One possible step toward a more open purchasing policy would be the lifting, of quotas, at least temporarily. Doing so would enable us to ascertain the effects of decontrol.¹⁷

A liberalized import policy could be justified also by the special geographical situation of Berlin. The Federal Government could meet its EEC partners objections by appealing to the protocol on inner-German trade¹⁸ and the Berlin declaration of the EEC partners,¹⁹ pointing out the opportunity for cheaper supplies to the city to be obtained from its environs. In the meantime the GDR leadership has learned to appreciate the importance of Western exports. The marketing efforts of the foreign trade organs, spare part supplies and maintenance services have been improved. Another favorable influence was exerted by the initiation of inter-enterprise cooperation relations, especially relating to production licences. By way of the improvement in the domestic supply the GDR can thus also develop additional sources of foreign exchange as well as utilize the know-how and marketing experiences of its partners.

On the other hand compensation transactions, though still a favorite of the GDR authorities, are not an appropriate tool for the long-term encouragement of Western trade. In fact they represent regression toward exchanges in kind and contradict the aim of maximizing foreign exchange prices. Anonymous and dumping sales also tend in the long run to work against the interests of the GDR.

Outlook

If inner-German trade is not to continue to stagnate, efforts on both sides will be necessary. These efforts must be directed mainly to the flow of goods from the GDR to the Federal Republic.

The GDR will have to continue expanding the assortment of competitive products and improving the attraction of its products in respect to fashion, design, servicing, spare parts supplies, and so on. It should devote more attention to production licences and more consistently use the good experiences acquired in the course of existing contracts to obtain additional delivery opportunities.

The Federal Republic's purchasing policy is also important for the creation of the opportunities for developing the German-German exchange of goods. As long as administrative barriers in the form of quota restrictions persist, not all the GDR delivery potential can be exploited.

To initiate a new boom in inner-German trade, such as was recorded after the broad based and committed program of encouragement undertaken by the grand coalition, we will have to go much further. The time for that would be rather favorable at this point, because the 1981-1985 is now in the process of drafting in the GDR. The swing negotiations intended for 1980/1981 might offer the external opportunity for staking out the basic positions for the near future. The reciprocal interest in this exchange of goods--economic as far as the GDR is concerned, mainly political from the standpoint of the Federal Republic--should be adequate to provide a new stimulus to inner-German trade. Considerations of this kind would be needed even if inner-German trade were to make advances in the current year.

FOOTNOTES

1. As per the data of the Federal Office for Statistics (Collection 6, Series 6). They include border crossing goods traffic but not services. The statistics issued by the Federal Ministry of Economics and the trust agency for interzonal trade differ, because they are statistics of accounts used in settling the traffic in goods and services insofar as it is regulated in the Berlin Agreement.
2. There are no official price statistics for the inner-German exchange of goods. We do, though, have some idea of the development of prices by virtue of DIW computations which are based on the statistics of FRG producer and foreign trade prices.
3. The D-mark payments made by the GDR (special account S) were again quite insignificant in 1979 and--as in 1978--lagged well behind the amounts in 1976 and 1977.
4. According to the data of the Federal Office for Statistics; Collection 17, Series 8 and 2.
5. For some years past the Federal Republic has been supplying oil to the GDR within the scope of inner-German trade; the FRG for its part has been receiving GDR oil products. A medium-term agreement to that effect was concluded in 1979.
6. See "Foreign Trade Burdens Lessen Growth Opportunities--On the Situation of the GDR Economy at the Turn of the Year 1979/1980," edited by Doris Cornelsen, DIW-WOCHENBERICHT No 6/1980.
7. See GESETZBLATT DER DEUTSCHEN DEMOKRATISCHEN REPUBLIK, Part I/1979, No 45, pp 457 ff.

8. See NEUES DEUTSCHLAND, 14 December 1979.
9. See NEUES DEUTSCHLAND, 15/16 December 1979.
10. See NEUES DEUTSCHLAND, 22/23 December 1979.
11. See Wolfgang Andrae, INDUSTRIE UND HANDELS-REVUE, No 45/1979, p 375.
12. Machine construction products (including products of the electrical engineering and vehicle construction industries) accounted for 55 percent of total GDR exports in 1978, for 70 percent in exports to the Soviet Union.
13. Total purchases excluding farm products and food.
14. Inner-German trade provides for several methods for preventing goods from access to the West German market: One is not to free products for any purchase whatever, that is not invite applications for import permits. In the sector farming/food industry this ban now applies to 200 of a total of 876 products (reporting numbers, items). Applications for import permits were invited for 561 products, in other words these could in principle be purchased. Among them 155 items were subject to restrictions in terms of value or volume. About 400 products were liberalized, in other words could be purchased without restriction. They were mostly products, though, which the GDR is unable to offer in sizeable quantities, goods of scant importance in the total economy or entirely insignificant items such as "crocodiles, lizards and tortoises provided they are exotic animals of foreign origin." Occasionally such liberalized items were included in quota restrictions when the GDR acted as the supplier.
15. The following figures demonstrate the extent of the concentration of purchases on a few specific products: According to data from the Federal Office for Statistics, in the period January-October 1979 13 items accounted for 76 percent of all products originating with the farm sector. Only 5 reporting numbers accounted for 54 percent of all purchases of agricultural and food products. These examples show how nonsensical it is to argue from item numbers when discussing quota restrictions.
16. See "New Impetus Needed for Inner-German Trade," edited by Horst Lambrecht, DIW-WOCHENBERICHT No 10/1979.
17. According to GDR reports a "goods cushion" of DM100-200 million annually is available but blocked by quotas. See Erich Freund, OST WEST COMMERZ, No 1/1980, p 14.
18. In this document the EEC partners acknowledged the special status of inner-German trade and, accordingly, the Berlin Agreement on Interzonal Trade which clearly states that "an appropriate part of deliveries and purchases will go to the economy of Berlin."

19. This declaration runs as follows: "The governments of the Kingdom of Belgium, the Federal Republic of Germany, the French Republic, the Italian Republic, the Grand Duchy of Luxembourg and the Kingdom of the Netherlands, in consideration of the special situation of Berlin and the necessity for the free world to support it, Due to the desire to reaffirm their ties with the people of Berlin, will offer their good services for taking all the measures necessary to ease the economic and social situation of Berlin, encourage its development and secure its economic stability."
20. Recently the SED general secretary pointed out that licenced production is suitable for the manufacture of high-quality industrial consumer goods, which might also supply foreign markets. See Erich Honecker, "Die Naechsten Aufgaben der Partei bei der Weiteren Durchfuehrung der Beschluesse des IX. Parteitages der SED" [The Coming Tasks of the Party in the Further Implementation of the Ninth SED Congress Resolutions], East Berlin 1980, p 34.

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PERFORMANCE OF AGRICULTURAL PRODUCTION SYSTEMS EVALUATED

Budapest NEPSZABADSAG in Hungarian 5 Feb 80 p 6

[Article by Benedek Toth: "Production Systems Precede the Revival"]

[Excerpts] Currently the activities of the country's 73 production systems extend to 46 percent of the large scale cultivated acreage of nearly 2 million hectares. It includes 36 percent of the large enterprise cattle population, 51 percent of the sow and 87 percent of the poultry supply.

The birth of production systems in our country in recent years has not been accidental. In the early 1970's the development of production cooperatives and state farms reached such a level, and such modern machinery, equipment, artificial fertilizers and chemicals entered into production that their sensible exploitation became a key matter. However, the creation of the necessary harmony has proven to be a difficult task. Istvan Losonczi, chairman of the Borota production cooperative recollects that: "When the systems were initiated there were opinions to the effect that if good strains, sufficient artificial fertilizers, chemicals and technology are available, there is no need to spell out the technology, because we know about it as much as they do."

Then the first conclusive results in which the production systems won contest after contest. The old, traditional, rigid views lost some of their force. Individual system managers were able to develop appropriate, modern, successful technologies based on their prior experiences, the achievements of Hungarian research institutes and foreign data, and to offer these to their farming partners. They truly revolutionized farming.

Appropriate to the given circumstances and to their goals, Hungarian production systems are varied and operate under different organizational forms, including the contractual partnership, the association and the independent joint enterprise. The relationships between systems centers and the member farms is likewise appropriately varied. The range of services offered by the systems centers is similarly broader or narrower.

It is difficult to overrate the fact how production systems influenced farming as a whole, and favorably shaped the outlook in individual production cooperatives and state farms. In fact, they have also influenced farms outside of the systems and spurred them on to higher performance. Much is expressed by the fact that currently 86 percent of state farms and 78 percent of production cooperatives are members of one or more production systems.

Quality Indicators

The two most important crops in our country's tillage production are wheat and corn. It is noteworthy that nearly a half of their cultivated areas already belong to production systems. The areas belonging to production systems have increased significantly through the years. Despite this, individual farms belonging to production systems regularly produce 7-8 quintals more wheat, and 15-20 quintals more corn than the national average.

It is appropriate to conclude this line of thought with the statement of Jeno Vancsa, deputy minister of agricultural and food industry affairs: "The achievements, however, are not measurable only in terms of increasing yields. The qualitative production indicators are even more revealing. Production systems contributed significantly to increasing labor productivity in agriculture. Ten years ago, the labor requirement per hectare of corn production was 165-170 hours of labor. Currently the average is 32-35 hours on large farms, and 22-25 hours for farms operating in systems. Labor productivity was increased six fold in sugar beet production. In wheat production, which was considered mechanized earlier, productivity was doubled through the utilization of modern instruments."

Thus through the stimulating influence of production systems, the effectiveness of the labor force and multiple shift usage of the valuable machinery increased among the partner farms. Moreover, the new technology and the new production procedures necessitated the rapid broadening of the professional expertise of specialists, tractor and combine operators, plant protection workers and animal husbandrymen. Along with this, it became necessary to provide for the employment of the released labor force. It is not accidental then that during these years the supplementary industrial and outside worker activities of the large agricultural enterprises developed to such a great degree.

Higher Standards

Appropriately to the new requirements, the system organizers assisted in the acquisition of machinery, spare parts, artificial fertilizers, plant protection agents and first rate seeds. In one fell swoop, this raised the standards for the selection of the necessary agricultural machinery, chemicals and plant and animal strains.

System membership is not mandatory, and voluntary membership has proved itself to be satisfactory. The farm itself determines which production system it wishes to join. And there is selection: there are 23 crop production, 32 horticultural and 18 animal husbandry systems. It is also permissible to relinquish membership, since either the mutual advantages bind the system organizers and the partner farms together, or there is no sense to a formal cooperation.

Janos Zsoter, the deputy production director of the Oroshaz State Farm is absolutely correct in maintaining that it is healthy to have competition between production systems.

The systems have a "constraining" influence in a certain sense. The previously closed enterprises have become open, and there have appeared "foreign" outside specialists and advisers who argue for the new and urge its adoption. These changes have transformed the old style of farm management.

In 10 years the production systems have acquired a wealth of experience. System organizers and the partner farms have gotten to know each other well. They see each other's strengths and weaknesses, advantages and mistakes directly. However, they need each other. Together they have traveled a very successful road. Now under changed circumstances they must likewise jointly gird themselves for the new tasks.

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1979 SOCIOECONOMIC PLAN FULFILLMENT REPORTED

Warsaw TRYBUNA LUDU in Polish 10 Feb 80 pp 3, 4

["Report of the Main Statistical Office on the Development of the National Economy and on the Fulfillment of the National Socioeconomic Plan in 1979"]

[Text] The realization of the economic tasks in 1979 took place under adverse conditions brought on by energy and transport difficulties and the shortage of certain raw materials and producer goods. In consequence of the exceptionally harsh winter, the spring floods and thaws, and the delayed growing season, disruptions in the fulfillment of the economic plan tasks occurred at the beginning of the year.

In subsequent months, the losses were gradually reduced and the production growth rate was accelerated.

The development of the national economy in 1979 is illustrated by the following key indices:

<u>Specification</u>	<u>Index</u> <u>1978 = 100</u>
Production sold in socialized industry	102.8
Total agricultural production	98.6
Basic production of socialized construction and installation enterprises	93.2
Freight transported by socialized transport enterprises	100.6
Production sold per employee in socialized industry	103.3
Employment in the socialized economy	100.0
Wage fund	103.3
Retail sales (in current prices)	108.3
Exports (in current prices)	112.2
Imports (in current prices)	106.3

[Table continued]

Investment outlays	91.8
Floor space of housing turned over for use in the socialized economy for nonagricultural people	99.5
National income	98.0
Gross worth of fixed assets	105.7

The Social Development of the Country

In 1979, the population of Poland reached 35.4 million, and of this figure, over 20.5 million (58 percent) consisted of urban dwellers. The population increment in 1979 was 333,000 persons. The natural population growth factor rose from 9.7 percent in 1978 to 10.3 percent in 1979.

The average employment in the socialized economy amounted to 11,989,000 persons in 1979 and showed approximately the same trends as in 1978. An increase in employment occurred in sectors connected with the improvement of the living conditions of the people, such as health care and social security, education and upbringing and housing, with the simultaneous reduction of employment in industry and construction, among others. In 1979, jobs were provided for about 440,000 graduates.

The monetary revenues of the populace from units of the socialized economy, including compensation for work, social services, revenues from the sale of agricultural products, etc. reached a level of 1,496,000,000,000 and were 9.5 percent higher than in 1978.

The wage fund in the socialized economy showed the following pattern:

<u>Specifications</u>	1979	index
	<u>in billion zlotys</u>	<u>1978 = 100</u>
Total	818.2	108.5
of this number:		
personnel wage fund	746.6	108.6
non-personnel wage fund, agent-commission fund, and fee fund	24.5	104.2
basic awards fund	33.1	114.3

The average monthly nominal wage in the socialist economy in terms of per capita employed persons in 1979 amounted to 5,087 zlotys and rose by 401 zlotys, or about 8.6 percent as against 1978. The cost of living index rose by about 6.7 percent as compared with 1978. As a result, the average real wage per capita of persons employed in the socialist economy rose by about 1.8 percent.

Savings deposits in general savings banks and in cooperative banks amounted to 456.5 billion zlotys in 1979, and were 47.4 billion zlotys, or 11.6 percent higher than in 1978. The rise in checking account holdings of the populace amounted in the same way to 26.8 billion zlotys, meaning that it was 17.7 percent higher than in 1978.

The average number of pensions and annuities (not counting services for private farmers) amounted to 3,879,000, and grew by 233,000, or 6.4 percent as compared to 1978. The sum total of payments of pension services reached a level of 124.4 billion zlotys, or 19.5 billion zlotys higher than in 1978, which is an 18.6 percent rise. The average monthly pension and annuities in force rose by 260 zlotys (or 11.5 percent) as compared to 1978, and reached the level of 2,525 zlotys.

This increase consisted mainly of the statutory raises in January 1979 of about 2.7 million for servicing pensions and annuities and an increase in the level of annuities from 1,450 zlotys to 1,625 zlotys as of 1 January 1979.

The average number of pensions and annuities for private farmers amounted to 289,000, i.e., it rose by 95,000 as compared to 1978, and the average monthly pension and annuity in force for this social group amounted to 1,772 zlotys, i.e., it grew by 409 zlotys, or 30 percent as compared with 1978.

In spite of the difficult conditions that materialized in 1979, especially during the first quarter, in socialized housing construction for the non-agricultural population, a total 10.5 million square meters of useful surface was turned over for use. This is 85.9 percent of the plan tasks, which is the level attained in 1978.

Over and above this, meaning, over and above the 10.5 million square meters, the construction and installation enterprises, turned over buildings with a total surface of 1.6 million square meters, or 13.2 percent [of the total] to work and housing cooperation institutions for finishing in 1979 and 1980. The final tally of the housing construction results will come after the first quarter of this year.

The current state budget expenditures for education and upbringing, culture and art, health care, social protection, physical culture and sports, and tourism and resort stays amounted to 167.6 billion zlotys, and were 13.8 percent higher than in 1978.

The number of accommodations in permanent nurseries at the end of 1979 amounted to 100,500, i.e., a growth of about 5,100 as compared with the situation at the end of 1978.

In 1979, 1,180,000 children (838,000 nursery school children included in this number) benefited from educational payments, which is a 5 percent increase as compared with the previous year.

In the 1979/80 school year, more than 7 million persons were studying in schools of all grades. About 562,000 children, or 3.4 [sic] percent more than in 1978, began attending first grade of elementary schools. The pupils of the first and second grades are studying in accord with new plans and programs of general 9-year intermediate school teaching.

During the current year, the number of consolidated parish (gmina) schools rose by 43 and amounted to 1,760 schools.

The number of newly-accepted first-year university level students amounted to about 92,000, of which, 62,000 are day students. In 1979, about 77,000 graduates completed university level studies, whereas about 7,000 graduates are completing studies for master's degree level. About 114,000 day students, which is about 39 percent of all the students engaged in day classes, are receiving stipends. In 1979, over 104,000 prizes were granted for students with good marks in their studies, and 1,400 awards for graduates with distinction were given.

Further development of the health services and social protection took place. The number of physicians per 10,000 inhabitants rose from 18.3 in 1978 to 18.8 at the end of 1979, whereas the number of dentists rose from 5.0 to 5.1 [per 10,000 population]. The number of health service centers at the end of 1979 amounted to 3,207, i.e., an increase of 25 centers. The number of beds in general hospitals at the end of 1979 amounted to 198,800, which signifies an increase of 1,900 as compared with the status as of the end of 1978. There was a further decrease in the infant mortality level. The death rate of infants per 1,000 live births amounted to 21.4 as against 22.5 in 1978.

The number of accommodations in social aid homes amounted to 59,400, i.e., 520 accommodations more than at the end of 1978.

In 1979, 7,000 titles of books and brochures, with a total circulation of 146.8 million copies were published, which is 7 percent less than in 1978. The total circulation of newspapers and journals amounted to 3,414,000,000, which is 3.2 percent less than in 1978.

The number of television subscribers amounted to 7770 thousand [number as published] and was 4.1 percent higher than in 1978.

In 1979, 4.4 million persons made use of vacations, and 2.6 million children and youth made use of colonies and camps, i.e., 43 percent of the pupils of elementary and intermediate schools.

In 1979, 9.1 million foreign tourists traveled to Poland, which is 14.6 percent less than in 1978; 10.3 million persons traveled abroad, which is 7.6 percent less than the year before.

Domestic Trade and Personal Services

Retail sales of goods by units of the socialized economy reached the amount of 1,203 billion zlotys, and were 8.3 percent higher than 1978 sales (calculated in current prices). The food sales increase was higher (9.0 percent) than that of non-food goods (7.6 percent).

Sales in food-catering enterprises abounded to 75 billion zlotys, which signifies an increase of 9.1 percent as compared with 1978, in terms of current prices.

The deliveries of certain products for supplying the market showed the following pattern:

Goods	Unit of Measurement	1979	
		Fulfillment	Index 1978 = 100
Meat, poultry, variety meats and products	tons	1,995,300	105.6
Fish and fish products	tons	252,900	105.6
Edible fats	tons	600,000	103.0
butter, included therein	tons	249,000	105.4
Milk for food purposes	liters	2,318,400,000	107.6
Cheeses and cottage cheeses	tons	249,000	102.5
Eggs	quantity	2,062,700,000	107.6
Sugar	tons	1,119,900	103.7
Clear and flavored vodkas in terms of 100 proof vodka	liters	175,200,000	93.9
Fabrics,			
cotton and imitation cotton	meters	286,600,000	97.9
wool and imitation wool	meters	59,500,000	102.9
silk and imitation silk	meters	84,100,000	95.0
Knitware	zlotys*	38,500,000,000	101.6
Woven fabric clothing	zlotys*	57,500,000,000	97.4
Leather footwear, of artificial and synthetic materials	pairs	66,100,000	106.8
Furniture	zlotys*	37,100,000,000	98.7
Household refrigerators	number	904,200	93.6
Electric household washers and dryers	number	787,100	90.5
automatic washers included therein	number	310,600	107.6
Sewing machines	number	250,300	137.1
Gas stoves with ovens	number	321,500	109.5
Multipurpose kitchen appliances	number	557,900	120.2
Porcelain tableware	zlotys*	2,512,000,000	117.4
Table glassware	zlotys*	3,763,000,000	122.1
Receivers:			
radios	number	2,175,200	100.7
television	number	1,021,200	96.5
color televisions included therein	number	164,600	112.6

*In current retail prices

[Table continued]

Tape recorders	number	730,500	113.7
stereophonic sets included therein	number	136,800	125.0
Passenger automobiles	number	216,800	97.0
Bicycles	number	1,419,200	109.2

The supplies of meat, poultry, and meat products as well as butter did not cover demand fully.

The supplies of certain non-food articles, such as furniture, paints and varnishes, and building materials, for which the demand was not fully satisfied, were below the plan targets.

The market was supplied in sufficient quantities relative to demand with refrigerators, gas ranges, vacuum cleaners, floor polishers, juicers, black-and-white television sets, and radio receivers.

In 1979, the sales of personal services in units of the socialized economy amounted to 176.8 billion zlotys, which is a growth of 13.0 billion zlotys (7.9 percent) as compared with 1978--in terms of current prices. The indices in agricultural services and in housing services showed a higher growth than average (about 10.0 percent each), and in the consumer services group (about 10.3 percent), including repair, construction and repair, laundry, barbering, and other services.

Industry

Products sold by socialist industry--in 1979 market prices--increased by 2.8 percent as compared with 1978, and by 5.1 percent according to the growth set in the National Socioeconomic Plan. Production earmarked for supplying the market rose by 4.1 percent, and production designated for export purposes rose by 4.4 percent.

Meteorological problems during the first quarter of 1979 and also problems in energy and transport and in the supplies of certain raw materials and producer goods had a particular influence on the formation of the production growth rate and the degree of plan fulfillment.

The plan for the production of certain very important products was exceeded, for example, the extraction of hard coal, and the production of metal-cutting machine tools, automatic control systems, passenger automobiles, anti-friction bearings, color television receivers, automatic washers, synthetic rubber, meat, poultry and milk for food purposes.

The production plan for certain important products was not completely fulfilled, including electric power, natural steel, rolled products, electrolytic copper, rotary electric machines, buses, tractors and agricultural machinery, sea-going ships, sewing machines, plastics, chemical fibers, synthetic fertilizers, cement, prefab wall structures, furniture, paper, cotton, wool, and silk fabrics, and footwear.

The production of the most important products in socialized industry showed the following pattern:

Product	Unit of Measurement	1979	
		Fulfillment	Index 1978 = 100
Hard coal	million tons	201.0	104.4
Crude oil refining	million tons	16.6	97.9
Electric power	billion kwh	117.5	101.6
Natural steel	million tons	19.2	99.8
Rolled products (with semifinished products)	million tons	13.6	100.1
Electrolytic copper	thousand tons	335.8	101.1
Anti-friction bearings	millions	130.1	118.0
Metal-cutting machine tools	million zlotys*	7,727.	105.5
Rotary electrical machinery	million zlotys*	9,411.	99.2
Automatic control systems	million zlotyx*	11,072.	111.5
Semiconductors	millions	230.5	108.2
transistors included therein	millions	84.6	110.3
Computers	million zlotys*	2,055.	126.9
Agricultural machinery and implements	billion zlotys*	17.4	99.7
Automobiles: passenger cars	thousands	350.1	107.5
trucks	thousands	50.6	91.6
Buses	thousands	13.2	98.1
Two-axle farm tractors	thousands	54.2	91.1
	thousand hp	2,480.	87.4
Sea-going ships (over 100 DWT)	billion zlotys*	21.3	107.0
Receivers: radio	thousands	2,663.	103.6
stereophonic sets included therein	thousands	209.7	79.8
television sets	thousands	915.4	94.2
color sets included therein	thousands	89.1	147.1
Tape recorders	thousands	849.0	93.1
Electric household washers and dryers	thousands	760.6	94.3
automatic machines included therein	thousands	302.1	110.8
Household refrigerators	thousands	766.9	86.1

[Table continued]

Household sewing machines	thousands	363.5	112.9
Fertilizers in terms of pure component (nitrogen, phosphorus, potassium)	thousand tons	2,431.	93.8
Plastics	thousand tons	440.8	94.3
Synthetic rubber	thousand tons	129.9	103.5
Chemical fibers, synthetic fibers included therein	thousand tons	244.3	97.0
	thousand tons	158.1	101.4
Pharmaceuticals	billion zlotys*	17.2	114.5
Cement	million tons	19.2	88.6
Prefab wall structures (in terms of fully burned brick)	billions	10.9	89.3
Furniture	billion zlotys*	36.0	98.5
Paper	thousand tons	1,010.	94.4
Fabrics:			
cotton and imitation cotton	million meters	884.5	96.2
wool and imitation wool	million meters	123.0	99.1
silk and imitation silk	million meters	163.3	97.4
Knitwear	billion zlotys*	21.0	101.6
Imitation fabric knitwear	million meters	111.3	111.6
Footwear (not including rubber)	million pairs	137.5	101.2
Industrially-produced fodder mixes	thousand tons	9,244.	92.9

*comparative prices

In 1979, the production of spare parts was increased--in part at the expense of finished products--by 14.0 percent as compared to 1978, including an increase of 26.1 percent in farm machinery and implement parts, 11.8 in motor vehicle parts, and 11.5 percent in tractor parts.

The number of products designed with the high quality rating increased from 25,000 in 1978 to 29,000 in 1979. It is a matter of pride that the value of products designed with quality rating "Q" and "I" amounted to about 190 billion zlotys, and its share of the products undergoing rating amounted to 26.8 percent in 1979 as against 25.6 in 1978.

The average employment in socialized industry in 1979 amounted to 4,773,800 persons and dropped by 0.5 percent in comparison with last year. This means

that the production increment was gained as a result of an increase in labor productivity, which rose by 3.3 percent as against the planned 5.0 percent growth.

The number of non-worked hours (not counting vacations) in terms of per capita worker of the industrial and developmental group increased by 0.6 percent, mainly as a result of paid down time and unauthorized absences. However, the number of hours not worked because of illness-caused absences dropped by 4.3 percent. The number of overtime hours worked outside of continuous operations per worker rose in 1979 by 7.6 percent.

Agriculture

It is estimated that the total value of agricultural production (calculated according to fixed prices) dropped by 1.4 percent as compared with 1978, of which, the value of plant production went down by 3.8 percent, and animal production rose by 1.4 percent.

The total area under crop in 1979 amounted to 14.6 million hectares. In comparison with the year before, an increase in the potato crops of 81,000 hectares or 3.4 percent occurred, and an increase in fodder crops of 82,400 hectares, or 3.2 percent took place. As a result of the adverse weather conditions (winter freezes and spring floods, the area of turnip and rape plantings was cut back considerably by 46.5 percent, and that of sugar beets dropped by 13.2 percent.

The harvests and yields of the main crops in 1979 showed the following patterns in 1979:

Specification	1979					
	Harvests			Yields		
	In mil. tons	Indices		From 1 ha. in q	Indices	
		1978 = 100	Average 1974- 1978 = 100		1978 =	Average 1974- 1978 = 100
Total grain	17.3	80.5	83.1	22.0	80.3	83.3
wheat	4.2	69.4	73.0	27.0	82.8	88.2
rye	5.2	70.0	74.8	18.1	73.9	78.0
barley	3.7	102.6	102.5	25.4	84.1	86.7
Potatoes	49.6	106.3	106.5	203.	102.5	109.5
Sugar beets	14.2	90.1	94.2	311.	103.7	105.4
Oleagenous plants	0.3	35.8	34.5	12.5	62.8	59.8
Meadow hay	14.7	100.3	97.8	59.2	100.9	98.3

Damage to the plants during the winter and pre-spring period, the spring floods, and the summer drought, which had decidedly unfavorable effect on the production results of all of agriculture were the primary factors in the drastic lowering of yields and harvests of grain and oleaginous plants in 1979.

In June 1979, the head of cattle in agriculture as a whole amounted to 13.0 million, which indicates a 0.6 percent drop as compared with June 1978, with a decrease of cows of 0.5 percent in this figure with a simultaneous increase in head of calves of 1.2 percent. Also, in agriculture as a whole, the number of pigs went down, and amounted to 21.2 million in 1979, or 2.3 percent lower than in June 1978. The number of sheep decreased by 0.6 percent as compared with the year before.

In socialized agriculture, there was a 1.0 percent increase in the head of cattle, of which, the increase of cows was 4.6 percent, and of sheep, 7.0 percent. At the same time, the number of pigs decreased by 3.6 percent, mainly in agricultural circles [cooperative organizations of private farmers].

In the non-socialized economy, there occurred a 1.2 percent drop in the number of cattle, a 1.7 percent drop in the number of pigs, and a 4.5 percent drop in the number of sheep.

The procurement of basic agricultural products of animal derivation showed the following pattern in 1979:

Specification	Units of measurement	Procurement	
		In absolute numbers	Index 1978 = 100
Slaughter animals, total, in terms of meat weight	thousand tons	2,658.5	105.2
included therein:			
beef	thousand tons	714.3	107.5
pork	thousand tons	1,527.5	102.9
poultry	thousand tons	317.2	113.9
Milk	million liters	9,977.8	100.0
Eggs	millions	3,445.5	104.6

The total value (in current prices) of agricultural products procured by the state from non-socialized agriculture was 8 percent higher than in 1978.

The number of agricultural production cooperatives increased from 2,060 at the end of 1978 to about 2,300 at the end of 1979. About 0.8 million hectares of land are being farmed cooperatively. The value of supplies for agriculture of tractors, trailers, engines, and agricultural machinery (not including farm variant motor vehicles) was about 34.3 billion zlotys, and was higher than the year before by about 4 percent.

In 1979, agriculture purchased 8,879,100 tons of feed from state stockpiles. The plan targets for sales were fulfilled by 99.3 percent.

Agriculture used 3,567,100 tons of synthetic fertilizers (in terms of pure component) for the 1979 harvest, i.e. 1.1 percent less than for the 1978 harvest.

Investment Outlays and Construction

In 1979, investment outlays amounted to about 553 billion zlotys, which signifies an 8.2 percent drop as compared with 1978. The share of outlays for machinery and equipment in the total value of investment outlays was about 46 percent, which means that it was maintained at the previous year's level.

The plan for turning over investment projects for operation in the socialized economy was not accomplished as a result of exceptionally poor conditions for realizing capital projects in the first quarter of 1979 caused by the onslaught of winter. About 30 percent of the investment projects were not turned over for operation. Facilities totalling more than 330 billion zlotys altogether in value were turned over for operation.

Of the 52 tasks of particular importance for the national economy, 30 were turned over for operation, including the non-casting rolling mill at the "Cedynia" Metallurgical Plant in Orsk, the carbon disulfate plant at the "Siarkopol" Sulfur Mine in Grzybowo, the first extractive facility at the Belchatow Brown Coal Strip Mine, the ore handling base in the "Katowice" Metallurgical Plant, and the metallurgical-sulfur railroad line for hauling ore, poultry plants in Torun and Poznan, dairy plants in Szczecin and Karczewo, and a sugar mill in Ropczyce. Among other things, part of the Children's Health Care Hospital Center in Miedzylesie was turned over for operation.

Socialized construction and installation enterprises turned out basic production valued at 347.3 billion zlotys in 1979, which represented a 4.8 percent drop as compared with 1978. The basic plan was fulfilled by 96.9 percent.

The average employment in socialized construction and installation enterprises amounted to 1,071,500 persons, and was 18,300 persons (1.7 percent) lower than in 1978, and 5,900 persons (0.5 percent) less than specified in the plan.

Transportation and Communications.

In 1979, socialized transport enterprises hauled 1,656,100,000 tons of freight, or 0.6 percent more than in 1978. Passengers carried by socialized public transport facilities amounted to 3,412,900,000 and were 2.4 percent less than in 1978.

The plan tasks concerning freight transport were fulfilled by 96.1 percent, and those with respect to passenger transport were fulfilled by 96.2 percent.

The Polish State Railways carried 479.5 million tons of freight and 1,100.6 million passengers. Freight loadings were less than in 1978 by 2.0 percent, and passengers carried was down 2.8 percent.

The deliveries of standard gauge rolling stock in 1979 amounted to: 130 electric locomotives, 188 combustion locomotives, 76 three-car electric sections, 10,651 freight cars, and 173 passenger cars.

The length of electrified rail lines amounted to 6,687 km, which amounted to 27.4 percent of the total length of standard gauge rail lines. In 1979, 191 km of lines were electrified, including the following sections: Poznan Gorcin-Zbaszynek, Lukov-Biala Podlaska, and Szczecin Dabie-Goleniow.

Freight hauls via public and industrial subbranch motor vehicle transport amounted to 1,073,600,000 tons and were 2.0 percent higher than in 1978.

Maritime shipping carried 39.2 million tons of cargoes, i.e., 5.8 [million tons] less than in 1978. The total tonnage of the maritime transport fleet flying the Polish flag amounted to 4,484,300 DWT as of 31 December 1979, and was 1.0 percent greater than at the end of 1978.

Inland waterway shipping carried 23.1 million tons of cargoes, or 3.1 percent more than in 1978.

The amount of transloading in commercial seaports followed the same pattern as in 1978 and amounted to 68.7 million tons. The transloading plan was fulfilled by 98.7 percent.

The total value of communications services (under comparative condition) rose 6.4 percent relative to 1978. The number of telephone subscribers as of 31 December 1979 amounted to over 1,851,200, and was 91,600 (5.2 percent) higher than at the end of 1978.

Foreign Trade

Foreign trade turnover (in current prices) rose 8.9 percent as against 1978. The value of exports reached 50.1 billion foreign exchange zlotys, i.e., it rose 12.2 percent, and the value of imports reached 54.0 billion exchange zlotys, which signifies an increase of 6.3 percent.

The main foreign trade targets were realized in 1979, in spite of unfavorable conditions during the first quarter of 1979; the plan tasks in the export area were fulfilled, a higher increase in exports than in imports occurred, and a lowering of the negative balance of payments in the amount of 2.4 billion foreign exchange zlotys was attained as compared with 1978.

Trade turnover with socialist countries rose 9.1 percent.

Further intensification occurred of trade turnover with CEMA countries, especially with the USSR as a result of the realization of the complex program

of intensification and improvement of cooperation and the development of socialist economic integration of the CEMA countries.

Trade turnover with capitalist countries were realized in 1979 under deteriorating trade conditions, and the unstabilized price situation (high increase in the prices of imported fuel) on the world market. In spite of this, the value of trade turnover with capitalist countries increased 8.7 percent, with an increase in exports of 12.9 percent, and of imports by 5.6 percent, and a lowering of the negative trade balance of payments by 900,000 foreign exchange zlotys.

The value of export of the electro-engineering industry (together with constructed facilities) rose 17 percent in 1979, and the share of this group of products in total exports rose from 47.0 percent in 1978 to 49.1 percent in 1979.

The value of imports of electro-engineering industry products was lowered by about 3 percent, and the share of this group of products in total imports went down from 40.9 percent in 1978 to 37.3 percent in 1979. The lowering of the imports of electro-engineering industry products was in accord with the plan bases and were connected with the planned reduction of investment outlays in 1979. At the same time, a considerable increase in the share of the value of fuels and energy raw materials, and products of the chemical, food, and light industries took place.

In 1979, the considerable imports of grain and nutritive fodders, oils, and oleogenous seeds continued along with that of food products for supplying the domestic market, such as, coffee, citrus fruit, and bananas.

National Income.

The generated national income dropped about 2 percent relative to 1978. This was the result of a slower increase in the growth of industrial production and an increase of costs in certain sectors of the national economy, especially in connection with the energy and supply difficulties.

In spite of the drop in national income, an increase in consumption of material goods from personal incomes of the populace of about 3 percent occurred, and converted to a per capita basis, this increase was over 2 percent. This increase was achieved as a result of the lowering of the increase in reserves, with a simultaneous lowering of investment outlays. Net investment outlays for fixed assets were lowered by about 14 percent, which is in line with the directions set forth in the plan. Further lowering of the share of investments in the national income took place.

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CSO: 2600

NEED FOR EXPORT-ORIENTED DEVELOPMENT OF ECONOMY OUTLINED

Warsaw HANDEL ZAGRANICZNY in Polish No 9-10, 1979 pp 3,4

[Text] The process of development in every modern economy results, most generally speaking, from the action of factors having an internal and external character. In a society with a planned economy the intensity of their impact depends to a considerable degree on the order of value given to development goals and on the means of implementing them when both actual and regulatory processes are involved. Formulating ex ante the rate and structural features of development and applying regulatory solutions that further this development depend as a rule on various internal social and economic conditions and also on current--at a given period of time--political and economic relations on the international scene.

Accurate forecasting of the development of these latter relations and the effective consideration of the conclusions stemming from such forecasts in the development plans is relatively burdened with the greatest uncertainty. The socialist countries grouped in CEMA have drawn practical conclusions from this fact even in the initial phases of industrialization and have created institutional and systemic conditions for a planned shaping of the division of labor among themselves which was linked with the intentions of their internal development. This made it possible to surmount, to a specified degree, one of the barriers encountered as a rule in rapid economic development particularly in those countries whose level at the "starting" moment is relatively low. As a rule, the lower a given country's economic and technical level of development the greater its "susceptibility" to the unfavorable influence of external factors and the greater the tendency then toward a broader utilization of internal factors in programming development.

These universally known truths find confirmation in the processes of industrialization and development in the Polish economy in the 1950's and 1960's. Based on these truths as well as the practical experiences in the strategy of socioeconomic development in the 1970's, the considerably increased role played by economic exchange and cooperation with foreign countries in implementing social goals and increasing the economy's

potential was taken into account. In the first half of this decade [1970's] this was seen in an acceleration in the growth rate of turn-overs in foreign trade, primarily in imports. The aim of opening the economy "to imports," as is known, was to expand and modernize productive potential in various sectors of industry. In addition to the known achievements, by the creation of these capabilities, in part of an export-oriented character, the economy's dependence on imports increased. This dependence was increased by the necessity to supplement imports of grain and fodder supplies.

The effects of these processes on forming export capabilities were relatively weaker--not only as a result of structural changes in the economy (seen, among other ways, in an extension of the internal--consumer and investment--market) but also as a result of worsening conditions in the capitalist market. In sum, this augmented the requirement to also open the economy "to exports" from the viewpoint of its external balance and the regulation of its further development.

The problems involved in the pro-export orientation in the development of the Polish economy in the forthcoming decade were the subject of the conference of the central party-economic aktiv which deliberated in mid-September, 1979, under the chairmanship of E. Gierek, the first secretary of the Central Committee of the PZPR. The conclusions and decisions of this conference should govern structural choices in the plan for 1980 and particularly in the five-year plan for 1981-85.

Such an approach to programming long-range development, not used more broadly up to now, constitutes (when exchange with foreign countries may be formulated as a factor influencing the internal ratio balance) a fundamental change in methods for formulating development ratios. At the same time, this has to mean a revaluation of the significance of external factors in the development process. The export-oriented nature of development should be expressed in structural changes in material production which consist in increasing the share of exports for this production (primarily in industry) and which have a bearing on its overall growth rate.

Such an orientation in the development of the economy for the next five-year period and, undoubtedly, for the entire decade of the 1980's, does not mean a revaluation of the basic goal of development, but it should constitute one of the basic conditions for achieving it in the longer term. Generally speaking, this occurs in two areas. The first can be reduced to the effects of solidifying external balance through an increase in exports, and thus of creating possibilities for matching import supply needs. A complete and rational utilization of productive capabilities should broaden the possibilities for meeting both present and future social requirements. The second area, considerably more complex in its conditions, pertains to augmenting the effects from outlays incurred by

participating in the international division of labor. These effects issue not only from the possibility of creating optimum conditions for the material structure of the social product, but also from the increased role of qualitative and intensive factors of development. The latter aspect seems to be of especially vital importance. An increase in exports apart from a suitable direction of means demands a considerable improvement in the ratio of outlays to effects. Thus an export-oriented development will "force" an improvement in the general effectiveness of management, which constitutes--in present conditions--one of the fundamental sources for increasing production and consumption.

The necessary conditions for giving export-oriented features to future development boil down to specific choices in the sphere of actual processes and to creating a set of measures that will have an impact on economic units, and thus to introducing suitable solutions in the sphere of regulatory processes.

It is primarily the existing productive (and also technical and cadre) capabilities of the branches and sectors with an established position on foreign markets that provide the basis for selecting the economic fields which should play an especially active role in increasing exports. As it was stressed at the above-mentioned conference, resources should be directed to further modernize these branches and sectors. Potentially, the most important possibilities for increasing noninvestment exports also exist in these fields.

Foremost among these fields is the electromachinery industry, which, particularly in the present decade [1970's], was the branch, relatively speaking, the most highly equipped with modern manufacturing capacities and techniques. The sectors of this branch have the established position of exporters. Among these can be counted the shipbuilding industry, the construction and road machinery industry, the complete industrial and power installations, the automotive industry, the aircraft industry, and the machine tool and instrument industry. A simple continuation of past development will not be possible in all these sectors because of expected changes in business conditions. Therefore, indispensable structural and technical transformations will be necessary within the framework of these sectors, and a pro-export orientation of the development of other sectors of the electromachinery industry will also be desirable in such sectors as the electronics industry, the electrical machinery and apparatus industry, the automatic control industry, the production of installations, equipment for environmental protection, and others.

Iron and steel metallurgy and nonferrous (primarily copper) metallurgy should play an active role in increasing exports and balancing the exchange with foreign countries. Even in the current five-year period a considerable reduction in the surplus of imports over exports of metallurgical products was made possible by new productive capacities in metallurgy. A decided reversal in this ratio will be possible in the next five-year period.

The structural changes and development of the chemical industry will have a special significance. Some of the sectors of this branch should considerably increase export production (the pharmaceutical, paint and varnish industries). The sulphur industry should maintain an export-oriented character. The development of some other sectors, oriented primarily toward meeting domestic needs, should then have an influence on securing external balance.

In light industry an export-oriented character should be maintained by the sectors producing goods with a higher degree of processing (the clothing, knitwear, and leather handbag industries). The significant degree of that industry's dependence on imported raw materials (mainly natural materials, the price of which constantly increases) demands selectivity in the proposed directions of its development.

Such industrial sectors as the furniture, ceramics and glass industries also have favorable conditions for increasing exports.

Stoking coal will continue to play an important role in Polish exports. The possibilities for exporting more coal depend not only on increasing extraction but also on rationalizing national consumption and increasing transport capabilities.

The development of agriculture and the agricultural food industry should be aimed toward a balancing of turnovers in the agricultural food goods group. This goal can be achieved by increasing productivity of agriculture and processing, by transforming the structure of consumption, and by strengthening sectoral export specialization, primarily through goods with a higher degree of processing.

This list clearly does not exhaust all the possibilities of export-oriented development. One can expect that the programming and planning work of many elements of the economy will be to search out these possibilities. The efficacy of this work will depend on skillfully and accurately forecasting the business outlook, on knowing the reserves, and on realistically evaluating the expected benefits. The crux of the matter lies in not taking desire for reality in programming certain export oriented undertakings--as has happened more than once. Consequently, this demands, raising the quality of programming and increasing the degree of responsibility.

In addition to strengthening the motivational impact, the changes which are under preparation in the system of planning and management of foreign trade, in the economic-financial system of the economic units, and in the system of organizing foreign trade should further this. We are not discussing them, since both last year and this year HANDEL ZAGRANICZNY [Foreign Trade] devoted much space to these problems. If these changes and improvements are to insure the desired effects, it is indispensable that they be comprehensively incorporated in connection with the functioning system of the entire economy. They should be marked by relative durability and consistency in usage. These requirements create specific conditions for action in management of the economy at all levels.

The questions under consideration here will remain a primary topic in HANDEL ZAGRANICZNY. Their objective will be both to continue discussing matters concerning conditions for an export-oriented development of the economy and to inform readers of the system solutions that have been introduced and of the outcome of work on long-term goal programs concerning these issues.

9451

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CONSTRUCTION OF STEEL-SULFUR RAILROAD LINE DESCRIBED

Warsaw INWESTYCJE I BUDOWNICTWO in Polish No 12, Dec 79 pp 1-6

[Article by Stefan Pozniak]

[Excerpts] The 1970's in Polish transportation investments brought a significant expansion in the railroad network. During this decade (including projects for 1980) almost 1,000 kilometers of new tracks and sidings were laid. The leading investment in this field during the first five years was the Central Railroad Trunk Line (CMK), whose 223-kilometer section built thus far linked Silesia to Warsaw by a new route (specifically, the Zawiercie and Grodzisz Mazowiecki stations); later the CMK will be extended by stages to the north, through Plock to Gdansk. During the second five years of this decade, the construction of the Hrubieszow-South Slawkow (in Silesia) line, called the steel-sulfur line (LHS) will lead in terms of size and importance. By 1980, this line will begin operation, playing a very important role in serving the transport needs of our national economy and particularly the Katowice Steel Mill metallurgical complex.

Subsequent research, studies and analyses have ever more clearly called attention to a search for a solution that would make it possible to entirely eliminate transshipments on the border, a link in the transport process that consumes a large amount of direct labor, equipment and time, hence is highly uneconomical. Thus arose the concept of a new Polish-Soviet border crossing near Hrubieszow and construction of a broad-gauge line from Vladimir Volynskiy through Hrubieszow-Bilgoraj-Staszow-Sedziszow-Bukowno to the ore unloading terminal in South Slawkow, from which the raw material would be transported by conveyor belts to the Katowice Steel Mill grounds. The Polish proposition met with understanding and support by the Soviets. During talks, an extensive program of cooperation with the USSR was negotiated, first for construction of a line, then for its operation and actual utilization.

In May 1976 an agreement was signed between the Polish People's Republic and the USSR on economic and technical cooperation in construction of a line, and during the same year work began on the first sections. In accordance with the agreement and the detailed trade contracts that were concluded, the Soviet Union supplied heavy type R65 rails and turnouts for construction of the entire length of the line (i.e., weighing 65 kg per running meter; the rail used heretofore on Polish State Railroads (PKP) tracks weighs 60 kg per meter), along with wooden sole-plates, heavy equipment for track construction and maintenance and certain kinds of specialized machines for repairing and maintaining railroad rolling stock. The Polish operating personnel was instructed and advised on this equipment and rolling stock by Soviet specialists. The Soviet side completed its deliveries on schedule and in many instances, ahead of schedule. Because the section of line from Vladimir Volynskiy to the Bug River and the bridge across this river were constructed ahead of schedule, it was possible to use this road as early as November 1977. It was the most convenient one for Polish construction contractors to deliver equipment and materials for construction of the remainder of the line.

This investment is one of the largest railroad expansions in PKP history. The 397-kilometer line is made up of sections totaling 226 kilometers, running as a second track next to existing standard-gauge lines, and the remaining sections, totaling 171 kilometers, running along a totally new route. To begin railroad operation, it was necessary to move about 35 million cubic meters of earth; build over 500 engineering structures, including 50 railroad bridges and 54 railroad viaducts; approximately 550 kilometers of main and station tracks; 180 buildings for engineering-operational purposes and railroad operating personnel, including locomotive shops in Zamosc, Bortatyce and Slawkow, and railroad car shops in Slawkow, Wola Baranowska and Hrubieszow; and 2,200 dwellings for workers. The estimated cost of the entire investment is about 16.5 billion zlotys (not including housing construction), of which construction-assembly works are estimated at 13.7 billion zlotys.

The normative construction cycle for such an undertaking is 112 months. This was much too long, considering the urgency of the needs that the LHS was supposed to satisfy. In view of the fact that the first departments of the Katowice Steel Mill began to operate at the close of 1977 and that production continues to increase greatly each year, construction time for the new line was a decisive factor in providing regularly scheduled transport service. Speed was essential. After thorough analysis, an efficient cycle half the duration of the normative cycle was accepted--closing in 56 months. The deadline for fulfilling requirements for train operation

on the entire line was set for the fourth quarter of 1979, and the deadline for completion of line construction was set for 1981. In practice, initial operation of a line is begun about three years after work in the field is started.



Figure 1. Route of the steel-sulfur line

The LHS provides two advantages which deserve special attention. First, the totally non-transshipped trade exchange with the USSR, which reduces transport costs, considerably shortens stopovers of the rolling stock on the border and speeds delivery of shipments. Second, the Soviet railroads furnish the freight cars used by the PKP at an agreed-upon price; this is an additional factor in the increase in hauling capacity of the Polish railroads, alleviating their shortages in standard-gauge freight cars.

What is most important is optimal utilization of this large transport investment for the good of the entire national economy. This will not be achieved if there is a lack of understanding, if the individual ministries, associations, plants or cooperatives stubbornly turn their backs on the LHS, failing to appreciate the potential advantages, as is presently done by some management units in relation to inland waterways and their navigation.

To begin with, the most important, of course, is ore. It is anticipated that the transshipment terminal located at the end of LHS at the Ore Treatment Plant in South Slawkow which has car dumpers, a thawing machine, a 4.5-kilometer conveyor-belt carrier and much auxiliary equipment, will be able to accept all deliveries of ore from the USSR for the Katowice Steel Mill as early as 1980, and in 1983 it will also be able to accept deliveries of ore for the old Silesian steel mills and for the Bierut Steel Mill in Czestochowa. In the first stage, these would be hauls on the order of 6 to 7 million tons, and in the second stage, about 10 to 11 million tons yearly. For the future, the concept of LHS operating in conjunction with navigation on the Vistula is contemplated, with construction of a base in the Sandomierz region for transshipping ore

from the broad-gauge cars onto barges, consigned for the Lenin Steel Mill, which could be partially supplied with ore from the USSR by this route.

There has been research, talk, and even preparatory work underway, suggesting that some of the goods imported from the Soviet Union, e.g., mazut for iron and steelmaking, asbestos for construction, cotton, paper, automobiles and other products of the machinery industry, potassium salts, and grain, be transported by the LHS.

In the opposite direction, haulage of coal and sulfur should be on the largest scale. The Ministry of Mining is building a hard coal transshipment terminal for this purpose in Slawkow Cieslach next to the ore unloading terminal. It should go into operation during the fourth quarter of 1980. After dumping their ore, some of the broad-gauge cars will be sent to the coal-loading terminal. Further expansion of this terminal (to which coal will be delivered from mines by the mining railroads) will make it possible to gradually increase exports of coal to the Soviet Union via the LHS route, and send it on through the USSR to Romania, and also to supply the internal needs of the provinces through which the LHS runs. The Polish side is interested in maximizing coal export by this road to relieve other outgoing lines from Silesia.

The Ministry of Transportation believes that the export of sulfur by this new line is also proper and warranted--in the first stage by using simplified and temporary methods for delivering and loading and in the second stage by using the siding built for this purpose in the new sulfur mining region. Under consideration for haulage by LHS are such export goods as chemical products, machinery, co-produced equipment and elements, light industry products, furniture, vegetables, fruits and processed goods.

Preliminary examination indicates that aggregate haulages by the steel-sulfur line may increase from about 7 million tons in 1980 to about 11 million tons in 1985 in the east-west direction and correspondingly from several hundred thousand tons to 6 to 7 million tons in the west-east direction. This means, of course, that the responsible ministries and cooperative headquarters must construct the necessary receiving and shipping facilities at suitable points of the LHS and that funds must be provided for this purpose in plans for the following years. It is also well to consider non-transshipment hauling capacity by the new road in selecting locations of industrial plants slated for construction which will be co-producing or trading with the USSR. Most likely natural events will suggest many other uses for the new route.

The engineering-operational parameters of LHS permit operation of heavy freight trains (up to 4,000 to 5,000 tons gross weight, i.e., much heavier than those now running on the PKP system), at speeds up to 100 kilometers per hour. The hauls will be made in entire trains running in a shuttle system. Regularity of traffic on the single-track line will be ensured by engine stations and passing sidings built along the line. In the first phase, the line will be serviced by diesel locomotives; in 1982-1983 it should be electrified. An automatic line block system and remote control traffic equipment will be provided.

The steel-sulfur line, in addition to fulfilling the basic goals, i.e., solving the problem of non-transshipped haulage of most of the ore and considerable quantities of other goods in USSR export-import, freeing other PKP lines from excessive hauls and improving railroad service to other regions of the country, brings additional, almost incidental, as it were, side benefits that are worth mentioning. One of them is the general ordering of the Zamosc transport system by moving the present railroad line from the center of the city and diverting both tracks, standard and broad-gauge, to a northern bypass which will allow planning of long-range territorial development of Zamosc, with simultaneous renovation of its old town. A second benefit, very important in PKP operation, is the fundamental reconstruction of the railroad system in the area of the Tunel station--a system which is now a bottleneck in haulage between Silesia and Krakow and the central and southeastern regions of the country. The third matter, now in the accomplishment stage, is a comprehensive program of arranging and expanding the vehicle road network in the zone abutting the LHS.

Let us add also that growth of this line will make it possible, beginning in 1980, to divert a considerable part of the executing potential involved here to other very important tasks in railroad transport development, such as construction of the eighth and ninth exit routes from Silesia and the port trunk line, which will occur by modernizing and expanding existing railroad sections: Kluczbork-Jarocin-Gnieszno-Naklo on Notec-chojnice-Tczew and Chojnice-Swinoujscie, opening a new export route from Silesia to the north, to both port complexes. The wealth of organizational and engineering experience obtained in building the LHS and the many solutions that were applied and perfected, will be valuable in accomplishing the other railroad expansion and modernization projects that will follow.

9295
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STRUCTURAL CHANGES, ECONOMIC EFFECTIVENESS IN FOREIGN TRADE

Bucharest ERA SOCIALISTA in Romanian No 3, 5 Feb 80 pp 23-26

[Article by Prof Dr Alexandru Puiu and Dr Iulian Danescu]

[Text] Firmly committed to a steady and rapid socioeconomic development, socialist Romania is actively asserting itself in the world exchange of material and cultural values by combining its own efforts with the advantages of its economic and technical-scientific relations with other countries. Nicolae Ceausescu's report to the 12th Party Congress, which is a comprehensive analysis and summary of our people's achievements, as well as the program opening up new horizons of progress emphasize "Romania's active and effective participation in the international division of labor, intensified cooperation in production, science and technology, a balance of foreign payments, and consolidation of our foreign exchange reserves" as basic aims of the next five-year plan.

Now more than ever the problems of each country's economic growth are inter-related and interdependent with the problems of international trade. This interaction is manifested in many ways. Exports of processed products especially, alongside the domestic market, contribute to harmonious development of the national economy and help to shift our resources to sectors of high technical and technological concentration where high labor productivity is obtained. As a factor for rationalizing production capacities, production for export regularly enhances economic effectiveness.

Foreign economic relations, especially as regards finances and foreign exchange, provide the monetary resources needed to carry out our extensive investment programs and to supply our national economy with producer goods that are partially lacking, particularly raw materials, fuels and energy as well as some equipment, machines and technologies. And industrial, scientific and technical cooperation stimulates economic growth by expediting promotion of technical progress and advanced experience in managing production and in organizing the marketing of products both in Romania and in the partner countries.

Clearly if these premises are to be implemented the principles of justice must be consistently applied in international economic relations in keeping with the requirements of a new world economic order. On the other hand the effects of foreign trade to a great extent depend upon the strategies and quality of the whole activity performed by the whole succession of units engaged in foreign economic relations, from the coordinating institutions to the foreign trade enterprises, from those producing the output for export to the whole system of export and import trade and foreign economic cooperation.

In view of the particular importance of participation of the national economy in the world circulation of material and cultural values, Romania constantly emphasizes development of foreign trade and the factors conducive to establishment of the new world economic order.

Despite a contradictory world economic situation characterized by intensive manifestations of disparity, instability and economic crises, Romania's foreign trade exchanges have shown a pronounced vitality. In 1978 the volume of foreign trade was 28 times greater than the 1950 figure, and Romania is now maintaining economic relations with 140 states compared with only 29 in 1950, indicating the broad receptiveness of Romania's economic collaboration.

Economic and scientific-technical cooperation is becoming increasingly important in our foreign economic relations, and it now contributes nearly 20 percent to the manufacture of our exports. Over 300 projects for international economic cooperation were implemented in 1978.

As a member of more than 40 international bodies of an economic and financial nature Romania is making an important contribution to their activity, which is another convincing proof of our state's wish to institutionalize international economic relations democratically.

The aims of the 12th Party Congress to further improve and develop Romania's participation in the international division of labor call for radical changes to improve Romania's foreign economic relations and enhance the contribution of foreign trade to the vitality of economic growth and to construction of the fully developed socialist society in Romania. According to the provisions, Romania's volume of foreign trade will be up 50-57 percent in 1981-1985 from the current five-year plan. The average annual growth rate of foreign trade (8.5-9.5 percent) will continue to exceed the growth rates of the gross industrial output (8-9 percent) and of the national income.

The steady development of Romania's export trade, which is planned to be up 60-71 percent in the next five-year plan, will be secured particularly by increasing sales of exported products and by further mobilizing all elements participating in production of export products, including research and design for purposes of introducing modern technologies and continually renovating products for export.

Growing Share of Processing Sectors in Export Total

The noteworthy progress made by Romanian industry during socialist construction is increasingly reflected in improvement of the export structure and in intensified industrial processing of the exported products. For instance, the proportion of products of the machine building, chemical and light industries has increased from about 25 percent in 1960 to 55 percent at the present time.

Industrial products like petroleum equipment, tractors and motor vehicles, chemical installations, cement factories, electric motors, radio and TV sets, machine tools, excavators, synthetic threads and fibers, plastics, synthetic rubber etc. have become traditional Romanian exports. The manufacturing equipment that Romanian industry and research can supply in the most varied fields in the group of machinery, equipment and transport means. The share of this subgroup, a bearer of technical progress, in the exports of machinery, equipment and transport means came to 22 percent in 1978.

Romanian industry's intensive participation in the world economic cycle is also indicated by the high proportion of exports in the total output of a number of commodities like tractors (62 percent), trucks and motor tractors (56 percent), radio sets (40 percent), tires (30 percent) and footwear (23 percent). According to the Directives of the 12th Party Congress, the proportion of groups of processed commodities in the total exports will reach 65 percent in 1985, so that Romania's participation in the international economic cycle will enter a new and qualitatively superior stage and the export structure will accordingly approach that of the economically developed countries.

In the context of a world economy more and more seriously affected by the limitations of the natural resources, these objectives serve a strategy of developing Romania's foreign trade that is designed to conserve material and energy resources and to make better use of Romania's manpower potential, technical skills, and highly skilled labor. It should also be noted that the planned structural changes will be made in such a way that, as we have mentioned, the total volume of exports will show a continuing growth.

In view of the level reached by Romanian industry and its modernization by expedited promotion of scientific-technical progress, and in view of the inevitable limitations of our natural resources and the fact that the industrial processing sectors are based to a great extent upon imported raw materials and fuel, firm measures are possible and necessary to perfect the export structure within the processing sectors as to products and standard sizes.

There is no question that the problems that arise in this connection are highly complex and require strategies that differ from one sector to another and sometimes even from one product to another, but some aspects with a more general validity come to our attention.

World experience indicates that nations' wealth depends not only upon the amount of goods produced but also upon the degree of processing upon which the latter are based. And in its turn the degree of processing heavily depends

upon the science and technology incorporated in these products. In international trade, despite the market convolutions of the last few years, the fact remains that the products that incorporate science and advanced technology are the ones that provide high and lasting effectiveness.

Despite the notable progress made in the export field, we still have considerable reserves for improving its structure, and especially for increasing the proportion of highly processed products. If we consider the machine building industry, a key sector in Romanian production and export, we find that steady efforts are still necessary to bring export sales up to parameters comparable to those attained in the industrial countries. Due to an historically formed structure, the average price per ton of exported Romanian machinery and equipment is now below that obtained by a number of developed industrial countries.

Major structural changes are needed to equate the degree of exploitation on the foreign market of metal exported in the form of machinery and equipment with that of the industrial countries. As a matter of fact one of the criteria for estimating the effectiveness of the production and export activity of the machine building sector is the ratio between the added value and the cost of the raw metal in the price obtained for 1 ton of equipment on the foreign market. As compared with about \$300-\$400 per ton, which is the price of rolled steel products, the price of machine building products shows an extremely wide range, from \$700-\$800 per ton to more than \$100,000 per ton depending on the degree of processing and the technical level of the product, and in some cases it runs to more than \$300,000 per ton. The state of the export trade, by virtue of its structure within these limits, ultimately reflects the effectiveness of the sector's participation in the international division of labor and the degree of exploitation of the labor input on the foreign market. Hence the importance of changing the export structure to keep increasing the proportion of the categories of products with a high degree of processing.

Note that the forecasts indicate just such a trend on the world level. It is estimated that the products on a high technical level, including electronics, computing equipment, data processing equipment, precision machinery, telecommunications, automation apparatus etc., will show the highest growth rates for imports. The share of this group of products in the total world imports will reach about 26 percent in 1985 (from about 21 percent in 1975) according to the estimates, and it will exceed the sum of \$100 billion. The growth of the share of these categories of products in Romanian exports of machinery and equipment is correlated with the investment and development effort planned for the production capacities in this field. The exports also require a particular marketing effort that will be based on a sufficiently high level of technical-qualitative competitive power.

At present such products as railroad cars, tractors and petroleum equipment have the critical share (over one-third) in our exports of machinery and equipment, while highly sophisticated apparatus (from sectors like electronics, precision machinery, aircraft equipment, scientific research apparatus etc.) amounts to about 5 percent of our exports and over 20 percent of the exports of the industrial countries. In the 1981-1985 five-year plan, according to

the provisions, production and export of the latter products will show a pronounced gain above the average for the machine building sector as a whole.

In the exports of the chemical industry, fine synthesis and low tonnage products, drugs, dyes, biostimulants, cosmetics, reagents etc. will be emphasized while the proportion of other products will be reduced.

Of course the range of possibilities for enhancing the effectiveness of exploitation of resources through export of highly processed products is much wider, since it includes all the industrial sectors and subsectors.

Improved Structure of Standard Models of Products

To be sure improvement of the export structure to enhance effectiveness by increasing the proportion of products with high scientific and technological concentration requires material and financial outlays and a certain amount of time, which can be considerably shortened by proper management. But it should be noted that the export structure can also be improved by making some changes in standard models of some groups of products. Of course the international prices of a number of products that have become traditional in Romanian production and exports differ considerably from one standard model to another. For example the prices for a ton of lathes with program control are 4-5 times higher than those for screw-cutting lathes (which are in the largest proportion in our export of such products), the prices for color TV sets are twice as high as those for black and white ones, the prices for passenger cars are over 3 times higher than those for freight cars, the prices for direct current electric motors are about 3 times higher than those for the standard ones, etc. We also mention that the average price per ton and also per horsepower for high-power tractors (180 hp) is 40-50 percent higher than that for small tractors (45 hp) and 35-40 percent higher than that for medium tractors (65 hp). It should be pointed out that in these cases too the changes that occur in the foreign market demand concern the very products that are now more highly priced. Clearly the industrial units in Romania will have to be more prompt in assimilating and expanding manufacture of the standard models of products that provide a better exploitation of the material resources for export.

There are also major reserves in other economic sectors and fields for intensified processing of exports and for making changes in standard models. In light industry it is possible and necessary to gradually reduce and eliminate exports with a low exploitation of raw materials such as raw textiles. To obtain high effectiveness their export will be replaced with that of finished textiles, especially garments and knitted goods. Exploitation of cotton for export is 2.2 times higher with fine textiles and about 4 times higher with garments and knitted goods. Major changes will also be made in these last groups of products. Priority increases are to be made in the export of garments and knitted goods with a higher degree of processing that command higher prices on the world market.

The requirements for intensive exploitation for export also apply to furniture. For example period furniture sells for 2-3 times more per cubic meter

of wood than modern furniture. The same ratio applies to the prices of upholstered furniture compared to those of curved chairs and unupholstered furniture, which unfortunately are still in a relatively high proportion in our exports via certain channels of world trade.

Reorganization to Conserve Fuel and Energy

The shortage of fuel and energy, with rising trends in the future, has recently led to intensified efforts to reorganize manufacturing equipment and processes. The view is more and more widely accepted that we are faced with a scientific-technical revolution with profound implications for the structure of investments, production and international trade, and one of its main purposes is better exploitation of the known energy resources with introduction of new energy sources into the manufacturing process. This gives rise to problems of radical reorganization to be accomplished in the longer range as well as adjustments that can be considered in the immediately following period.

In metal exploitation, for example, the requirement to conserve energy can be met chiefly by intensifying its processing, since as we know the most energy is consumed in production of rolled steel products. As the documents of the 12th Party Congress indicate, the fact that the iron and steel industry is a heavy consumer of energy and that it is mainly based upon imported iron ores calls for further efforts to properly proportion steel production and the production and export of machinery and equipment, especially since on the world level production and export of machinery and equipment have shown a rising evolution while the iron and steel industry has bogged down in chronically unused production capacities. As a rule the countries with intensive iron and steel industries are now abandoning development of ferrous metallurgy and confining themselves to improving its technology.

Nitrogenous fertilizers and sodium products are among the energy-intensive products with a high proportion in our exports. In the last few years nitrogenous fertilizers and the sodas have accounted for about 40 percent of our exports of finished chemical products. Delivery of nitrogenous fertilizers and the sodas to the foreign market is a cheap export of energy, and it calls for reduction of the share of these products in the total exports. While salt, a natural resource of which we have enough, is exploited in production of the sodas, chemical fertilizers require consumption of petroleum, a raw material that has become very expensive. Moreover some calculations show that export of agricultural products, especially the processed ones that would be obtained by using the fertilizers in domestic production, is generally more effective than exporting the fertilizers.

A careful strategy is also required for production and export of cement, an energy-intensive product whose manufacture is highly pollutant and entails heavy material, manpower and financial outlays on shipping, handling etc. Under these circumstances we do not consider it advisable to maintain cement exports at any high volume and especially to develop it in the next period.

Marketing Strategies

In Romania more effective exports to a great extent depend upon determining and implementing suitable marketing strategies that will better serve the foreign market demands and sales at the highest possible prices. This often requires a shift from exports of products to complex exports involving better exploitation of the manpower incorporated in the construction of factories and compound installations, in services, patents, know-how [sic], manufacturing processes, aid in personnel training etc. The next five-year plan provides a considerably increased proportion of these composite activities in the course of exporting machinery and equipment.

Moreover in some cases it has become much more effective to export "activity systems" than some products. For example, we are thinking of the possibility of promoting export of agricultural mechanization systems including tractors, other agricultural machines, irrigation networks etc., railway systems including sale of rolling stock and of automation and traffic control equipment, or calculating systems including calculating programs to meet the beneficiaries' particular requirements and the pertinent marginal systems in addition to the computers.

As for export of series products, in addition to the traditional marketing methods consisting of delivery of finished products, their sale is being developed in the form of parts and subassemblies, giving rise to more far-reaching and lasting buyer-seller relationships. For instance, assembly plants are being built in the partner country to mount the delivered subassemblies and parts. This marketing method has become very widespread in trade in motor vehicles of all categories, but it is beginning to be extended to other fields too. Most governments of developing states are encouraging imports of this kind, in the effort to create embryos of local industry that will provide for the employment and training of the indigenous manpower as well as the development of some subsupplier industries.

We should point out the exporter's interest in the regularity the deliveries acquire, the expansion and control of the selling market, the addition to export of physical products of a highly profitable invisible export, etc. With a varying degree of integration, the developing countries are now assembling over 2.5 million motor vehicles a year in hundreds of assembly lines, and in most cases their production is in full development and tends to eliminate the necessity of importing assembled motor vehicles. Under these circumstances export of assembled motor vehicles will encounter greater difficulties in the future in selling on markets that are protected by prohibitive tariff and nontariff barriers to protect the respective national industry. Marketing in the form of unassembled products mounted in lines installed for the beneficiary is already in intensive use in export of motor vehicles of all categories, it is being extended to the trade in tractors and agricultural machines, and it will be extended to other series products as well, including consumer goods like TV sets, electric household appliances, etc. Another important trend in world trade in machinery and equipment is resulting from intensified international specialization to the point of specializing in subassemblies and components of machines.

By resolute action in the directions outlined by the 12th Party Congress, the Romanian export trade will qualify more and more as a factor for better exploitation of the nation's natural and human resources, making an important contribution to the rise of the Romanian economy to new heights of industrial civilization.

5186

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CHANGES TO RESULT IN ACHIEVEMENT OF DEVELOPED NATION STATUS

Bucharest REVISTA ECONOMICA in Romanian No 52, 28 Dec 79 and No 1, 4 Jan 80

[Article by Prof Dr Gheorghe Cretoiu: "The Transformation of Romania Into a Socialist Country With Average Development"]

[28 December 1979, pp 2-3]

[Text] The Romanian people are entering the new year, 1980—which concludes the current decade and a five-year period with special significance in the economic and social evolution of Romania—having ahead a clear and inspiring prospect not only for the year that is coming but also for the next five-year period, 1981-1985, for practically the whole decade that follows. The documents adopted by the 12th RCP Congress represent a vast program for economic and social development of the country, with a sound and multilateral substantiation, based on deep knowledge of the current stage and possibilities and of the requirements of the next stage of progress of the homeland and on the taking into account of the current international conditions, of the implications that the new phenomena in the world economy and on the international market have.

In the light of the report presented by Comrade Nicolae Ceausescu and of the other documents adopted, the congress established—as is pointed out in the resolution adopted at its close—"that the basic objective of the next five-year plan will be the continuation, on a higher level, of the implementation of the party's program, the development of the national economy at a steady rate, the strong affirmation of the scientific and technical revolution in all fields, the transition of all economic and social activity to a new quality." The even stronger consolidation of the socialist mode of production, the raising of the degree of civilization of the whole populace, the strengthening of the material and spiritual force of the country, of the independence and sovereignty of socialist Romania, are provided on this basis.

Foreshadowing the transformations of great amplitude that our country will undergo in the 1981-1985 period, Comrade Nicolae Ceausescu pointed out in the report presented to the 12th congress: "The fulfillment of the

provisions of the next five-year plan will accelerate the country's development both in the field of the technical-material base and in that of the organization of society, with provision being made for the growth of per capita national income, the improvement of the living conditions of the masses, the raising of the level of education, science and culture, of the general degree of civilization of our people. Romania will thus pass the stage of a developing socialist country and will become a socialist country with average development, traversing a stage of the greatest significance in the implementation of the party's program, on the way to the communist society." The data referring to the main indicators of economic and social development are indicative of the evolution of our economy and society (see Table 1). On a wider plane, the orientations of the economic and social development of Romania are established in such a way that, in the main, the tasks for forging the multilaterally developed socialist society and the advancement of our country toward communism will be achieved in the next decade.

Table 1. The Main Indicators of Economic and Social Development in the 1976-1985 Period

Indicators	1975	1980	1985
Employed population (millions of persons)	10.2	10.5	nearly 11.5
Fixed assets (billions of lei)	1,203.3	nearly 2,000	3,000
Total investments in the economy (billions of lei per 5 years)	548.9	about 970	1,300-1,350
Gross industrial output (billions of lei)	586.9	1,004.3	1,476-1,546*
Per capita national income (thousands of lei)	17	27	34.6-35.9
Social labor productivity (thousands of lei)	35.0	58	about 84
Average real salary (lei per month)	1,595	2,261	2,670
Real incomes of cooperative peasants (lei per month)	990	1,388	1,741
Population's incomes from social consumption funds (lei per year per family)	8,780	12,000	14,200
Percentage of urban population	43.2	52.3	54.5

* An estimated level calculated by the author.

The formulation of the thesis regarding the passing of the stage of a developing country and the transition of Romania to the ranks of the countries with average economic development—a thesis rich in content, with many possibilities both on the plane of economic theory and on that of social practice—constitutes the concrete expression of the stage of economic and social progress that our country will attain in the middle of the next decade. At the same time, this theoretical orientation places before the Romanian people a mobilizing objective that fully engages the energy and will of the whole nation in the complete utilization of all resources and possibilities in order to raise the homeland to higher and higher levels of socialist civilization.

The formulation of this essential objective, and of the other objectives and provisions, is based on a realistic judgment of not only the requirements of the current stage of socialist construction but also the possibilities of the Romanian economy, arising primarily from the level that it has attained as a result of our communist party's consistent promotion of the policy of development and modernization of the production forces. The choices for socialist industrialization and the allocation, especially in the last three five-year periods, of a significant part of national income for accumulation, and the mobilization and rational use of all human, material and financial resources lie at the basis of the accomplishments. At least the following aspects are indicative in this regard: 1) on the basis of the steady development of social production, the per capita national income rose from 2,200 lei per capita in 1950 to over 21,100 lei at the end of last year; 2) under the conditions of the implementation of bigger and bigger investment programs, the value of the fixed assets put into operation—and thus the degree of technical equipping of labor as a basis for steady growth in productivity—rose continually, from 24,600 lei per employed person in 1950 to nearly 154,000 lei in 1978, with it rising to about 260,000 lei in 1985; 3) as a result of the consistent promotion of the policy of socialist industrialization of the country, for a number of industrial products Romania has significantly approached or for some has even equaled the level attained today by many developed countries.

The realism of the objectives established by the documents of the 12th congress is based on the steady rates that our country has achieved thus far and on those proposed for the future. According to the data of the World Bank, in the 1960-1976 period the average annual rate of growth of the per capita gross national product was 2.3 percent in Switzerland, 3.0 percent in Sweden, 3.7 percent in Canada, 2.4 percent in the United States, 3.9 percent in Norway, 3.3 percent in Denmark and the FRG, 4.1 percent in Belgium, 4.3 percent in France, 3.8 percent in Holland, 4.3 percent in Austria, 3.2 percent in the GDR, 8.5 percent in Japan, 3.8 percent in Italy and 8.4 percent in Romania.*

Undoubtedly, in each stage the rate of economic growth has given to economic development a multiple conditioning, which takes into account a group of factors, of an economic, technical, social and political order. In connection with this matter, different opinions have been expressed in the international literature. In Western literature the economists of a neo-Keynesian orientation have put the accent on a so-called natural rate of growth, characteristic of the periods of economic maturity, when a quantitative saturation in the providing of funds per capita has been reached, the radicals and pessimists have foreseen "zero growth," applied without differentiation to the level of development, and the institutionalists have foreseen stadial rates of growth, from which some have proclaimed the inevitability of a decline in the rates of growth. In socialist economic theory, the matter of rates has often been approached from the angle of competition between socialism and capitalism.

* "World Bank Atlas," 1978, p 6.

In the view of our party, the rate of economic growth has a multiple conditioning and fulfills complex functions, it lying at the basis of the solution to essential economic and social problems of socialist construction: the passing of the stage of a developing country and the raising of Romania to the level of the economically developed countries; the modeling and remodeling of the structure of the economy and of the system of economic proportions in accordance with the requirements for providing a modern, highly technical and efficient economy; the full employment of the work force at a qualitatively suitable level; the use of the whole creative potential of the people; the raising of the degree of participation in the international division of labor; the improvement of the country's position in the world economy; and the raising of the efficiency of foreign economic exchanges. According to this view, the solving of the problems of economic growth has now entered a new stage that is characterized by the matter of placing in the center of the concerns of economic policy the optimization of the proportions within the framework of a program of broad perspective that is aimed at the intense promotion of scientific and technical progress and the accenting of the qualitative aspects, which directly express the growth of the final results, of the final use values, the reduction of material consumptions and the growth of the newly created value.

Contrary to the predictions of foreign commentators, according to which Romania would greatly slow down its development, the next stage of the forging of the multilaterally developed socialist society is also distinguished by the continuation of the vitality of the development of the national economy. The new horizons of economic growth that the directives of the 12th congress open up in the seventh five-year plan are characterized very graphically by the fact that, on the basis of the growth of social production at steady rates, the increase in national income (the average annual rate of growth will be 6.7-7.4 percent) in the next 5 years will be equal to the increase achieved in 8 years of the current decade (in 1978 as compared with 1970). In the field of industrial activity, an average annual growth of 9 percent in gross output and 10 percent in net output has been predicted for the 1981-1985 period, which will permit an increase in gross output equal to the whole output in 1975 and 3 times higher than that in 1965 to be obtained for the whole five-year period.

Undoubtedly, in some industrial branches that are big consumers of energy the dimensioning of the rates of growth has been done by starting from the requirements for the economization of energy resources, with the stipulated levels being limited to the bare minimum. At the same time, it is necessary to mention the fact that under the conditions in which the main accent of the concerns falls on the qualitative aspects some quantitative indicators no longer have the same significance as before. To this are also added the phenomena that occur in the world economy and on the world market whose influence is also reflected to a greater or lesser extent in the development of the planned economies, although they cannot impede the progress of the Romanian economy. As Comrade Nicolae Ceausescu pointed out in the interview given to the Dutch weekly NIEUWS MBT, in view of the growth

of the gaps between the developed countries and the developing ones, Romania is determined to further make constant efforts to come closer to the economically developed countries, so that, despite the difficulties existing on a world level, it attains the objectives that it has proposed for itself in the next 5 years.

The allocation of about 30 percent of national income for economic and social development in the next five-year period, the constant and more intense concerns for the wide promotion of technical progress and the efficient use of all resources, the scope of the process of forming and improving the training of the work force, the firm application of the new economic and financial mechanism in all sectors, and the accenting of the qualitative aspects of the activity are the main factors on which the provisions of the 12th congress for maintaining economic vitality in the next five-year period are based. Although for some indicators the rates of growth in the next five-year plan are lower than in the current five-year plan, the growths expected for industrial production and national income provide for the development of the Romanian economy at rates that exceed by a factor of 1.5-2 those registered on a world level or in the developed countries.

The provisions for growth of national product and national income to a high level in comparison with the average annual rates of growth of gross national product in the developed capitalist countries (our note—we have in mind data evaluated by the World Bank for the next decade) are indicative in this regard. Thus, while our country's national income rose at an average annual rate of 10.8 percent in the 1970-1978 period and an average annual growth of 7.2-7.7 percent is foreseen for the 1981-1990 decade, the rates for gross national product in the developed capitalist countries as a whole are 3.4 percent for the 1970-1978 period and 4.2 percent for the next decade.* Of course, in this period an increase in population will also occur, but, according to the calculations, in the 1981-1985 five-year period our per capita national income, which will increase from 27,000 lei at the end of this five-year period to 34,600-35,900 lei in 1985 (table), will rise at an average annual rate that is 1.8 times higher than the average annual growth of the per capita gross national product registered in the past decade in the majority of the countries that now have a gross national product of over \$2,500 per capita. On this basis, in 1985 it will be possible to achieve, as the directives of the 12th congress point out, a per capita national income of \$2,400-2,500, an essential condition for Romania's transition to the ranks of the countries with an average level of economic development.

The characterization of the level of economic development cannot be based only on a single indicator, especially under the conditions in which the degree of expressiveness of gross national product is seriously affected not only because of the differences in the content and the methodology of

* See: "Rapport sur le Developpement Dans le Monde, 1979," World Bank, August 1979, p 4.

calculation but also especially because of the stronger and stronger influences that the inflationary phenomena and the drastic increase in prices in the developed capitalist countries have.* The absolute levels of per capita production in physical terms, the structure of social production and especially of the processing industry, the material base and the social infrastructure, the social labor productivity and so on have a leading role in this regard.

The passing of the stage of a developing socialist country and the transition to the ranks of the countries with an average level of development also mean a significant increase in the level of per capita industrial production. For some products Romania has already come closer to some developed countries, and the number of industrial products for which our country has achieved the level of per capita production in the developed countries will rise considerably by the middle of the next decade. It is significant that for the production of electric power, for example, in 1950 the ratio between the per capita production in the developed countries and our country's production, considered equal to 1.00, was 7.1 for England and Austria, 6.1 for France, 5.7 for Czechoslovakia and 20 for Sweden and the United States. In 1977 it had fallen to—in order—1.83, 1.81, 1.44, 1.6, 3.65 and 3.83. For other products, such as steel, synthetic yarns and fibers, synthetic rubber, sulfuric acid, meat and sugar, the provisions for 1985 put our country at the level of the developed ones. For sugar, in 1977 this ratio was 0.57 in the case of England, 2.00 in that of Austria, 1.75 for Czechoslovakia, 2.42 for France, 1.27 for the GDR and 1.45 for Hungary and the FRG.

In accordance with the basic objective of the next five-year plan, the transformations of a qualitative order, meant to provide a rise to a higher level for the degree of modernity of the national economy, the efficiency of economic activity, and the country's participation in the world economic

* The reservations with which one must view the published data referring to the gross national product [PNB] in market prices were analyzed in detail in the article "Romania's Evolution Toward the Stage of a Country With Average Economic Development," published in *ANALELE DE ISTORIE*, No 4, 1978. To us, the considerations of the well-known American economist F. Denison, who felt that for an evaluation of gross national product it is necessary to utilize not the market prices but the cost of the production factors or that for a comparative analysis of economic growth it is necessary to eliminate the influence of the increase in prices by relating the growth of the PNB in market prices to the price-increase indices, seem very important. In order to show how great the influence of the increase in prices is, we mention that, according to some calculations, the average gross national product of the developed capitalist countries, with different methods of evaluation, had the following size: \$3,420 in the prices and at the official rates of exchange in 1970, \$3,965 in the case of using the prices and the parities of the purchasing power in 1970, and \$5,785 in the prices and at the parities in 1976.

circuit, lie in the center of the process of transforming Romania into a socialist country with average development from an economic viewpoint. The current stage of achievement of these transformations is distinguished by the wide sphere of inclusion, which extends to the scale of the whole process of expanded socialist reproduction and, in general, of our whole economic and social organism, by the growth of the interdependencies between the technical, material, economic, organizational and social aspects of development and by the unitary coordination of the means and measures meant to provide for the fulfillment of the stipulated objectives.

The realities of the contemporary world indicate that the capacity to adapt the national economy to the changes that occur in the level of science, engineering and technology, to the quite varied, continually growing and often contradictory demands of the world market, represents a leading parameter of the level of economic and social development. And this capacity is decisively connected with the level and structure of the production forces, with the technical and technological level of the technical-material base and with the quality of the main production force of society—the work force. Consequently, the accenting of the qualitative processes in the economy has as a dominant premise the strong affirmation of the contemporary scientific and technical revolution in all fields of activity and is based on a vast program of renovation and modernization of the production apparatus and the production technologies.

[4 January 1980, pp 12-13, 24]

[Text] The development and modernization of the technical-material base of society in the next five-year plan, as a decisive factor in the steady expansion of the national economy, in the continual strengthening of the economic potential of the homeland and in the resolution of the complex tasks connected with the forging of the multilaterally developed socialist society, are based on the implementation of a vast program of investments, which represent 1.30-1.35 trillion lei.

Under the conditions of the implementation of this vast investment program, there will be an increase by a factor of about 1.5 in the value of the fixed assets that operate in all branches of the national economy. The absolute growth of the fixed assets put into operation, which is nearly 1 trillion lei over the level in the last year of the current five-year plan and which is practically equal to that achieved in the 1970-1980 decade, will cause the technical equipping of labor, expressed by the value of the fixed assets per employed person, to rise from nearly 154,000 lei in 1978 to about 260,000 lei in 1985. If we consider only the productive part of them, whose percentage will be 77 percent in 1985, then per inhabitant employed in the productive branches the value of the productive fixed assets will rise 45 percent in comparison with 1980.

The qualitative changes have the decisive role in the stronger affirmation of the technical-material base of society, in the maintenance of the

vitality of the national economy. These are marked by the growth of the percentage of fixed assets recently going into operation, with an age of less than a decade,* by the intensification of the providing of high-performance machinery and equipment and the growth of their percentage in the general structure of the fixed assets in the basic branches of the national economy (both through the investments in the over 1,200 new production capacities and especially through the modernization of about 1,100 important industrial units) and by the renovation of a large number of technological products.

In the field of means of labor, one notes the growth of the percentage of complex technological equipment, the wider and wider integration of precision machinery, electronics and computer technology and the expansion of machine tools of high productivity and intensity in all branches of the national economy. In industry, more than 1,200 new and modernized production technologies, mostly of Romanian devising, will be introduced. The provisions of the directives of the 12th congress that in 1985 about 60 percent of the steel production, which will reach 870 kg per capita, is to be achieved in oxygen-blast converters and about 95 percent of the cement production, which will be 840 kg per capita, is to be achieved by means of the dry procedure—more economical methods from an energy viewpoint—are indicative of the proportions of the changes that will occur in the direction of creating a modern technological structure. In housing construction, there will be a considerable increase in the degree of prefabrication, which marks the accenting of the processes of industrialization in this branch, with the respective degree reaching 85 percent.

In accordance with the requirements for modernizing the means of labor and the production apparatus, along with the general growth of production, important changes will occur in the field of the objects of labor, of the production and utilization of raw materials and supplies, through the growth of the percentage of materials with superior properties, through the development of new energy sources and of the production of substitutes and through the growth of their degree of processing. The orientations regarding the development of metallurgy through the more marked development of the production of special, alloy and high-alloy steels and stainless and

* As was indicated at the 12th party congress, over 60 percent of the approximately 1.80 trillion lei in fixed assets now existing in the economy were put into operation in the past decade, which constitutes a graphic expression of the high degree of modernity of the technical-material base. We mention that, according to the periodical *AMERICAN MACHINIST*, No 2, 1973, at the start of the decade the percentage of equipment with an operating life of up to 10 years was 33 percent in the United States, 38 percent in Canada, 50 percent in Italy, 41 percent in Great Britain and 63 percent in the FRG and, according to the French periodical *L'EXPANSION* of November 1978, the respective proportions were 33 percent in the United States, 34 percent in France, 37 percent in the FRG, 39 percent in Great Britain, 42 percent in Italy and 60 percent in Japan.

electric steels are indicative along this line of thinking. The production of basic macromolecular products—with a level of 25 kg per capita in 1978—will increase and be diversified and it will come to over 72 kg per capita in 1985. The production of synthetic yarns and fibers will rise from 6 kg per capita to 16 kg and the production of synthetic rubber will rise from 7 kg to over 19 kg. We mention that in 1978 some industrially developed countries like France and the United States achieved per capita, respectively, 52 and 55 kg of plastic, respectively, 5 and 16 kg of synthetic yarns and fibers and, respectively, 9 and 11.4 kg of synthetic rubber.*

The obtaining of industrial products involves, of course, a significant consumption of energy resources, it being necessary to act in every way in order to reduce it, with these products being, in any case, necessary to the economy. Thus, the diversification of steel production and especially the achievement of higher qualities are required by the modernization of production in the machine-building industry, and the cement production is dimensioned above all in accordance with the needs for carrying out the investment program. In addition, even if a quantity of energy resources twice as great as the average consumption per ton of steel is consumed for a ton of stainless steel, for example, the importation of such a product costs 7 times more.

The amplification of the process of achieving a modern, highly efficient structure represents one of the basic traits of the economic and social development of Romania in the next five-year period. In this context, the transition of Romania to the ranks of the countries with average economic development will be marked, on the one hand, by the accenting of the industrial character of the national economy and, at the same time, by the constant modernization of the technical-material base of agriculture and, on the other hand, by the pronounced modernization of the structure of industrial production.

The percentage of the main branches, especially industry and agriculture, in national product and national income, as well as in the employed population, represents a basic indicator of the general structure of the economy that can give a picture of its profile and expresses, in the final analysis, the social labor productivity. Undoubtedly, many factors of economic development, as well as the characteristics of the national economies, of the methodology for determining the national product and of the price system, have their say in this field. Nevertheless, the industrial-type economies are characterized by a big contribution from industry to the formation of national product in relation to the contribution from agriculture,

* In order to reduce the weight of automobiles, which decreases gasoline consumption, the plastic consumption per automobile in U.S. industry will rise, according to some judgments, from 77 kg in 1976 to 100 kg in 1980 and 135-160 kg in 1985. For aluminum the consumption per automobile will rise from 40 kg to 90 kg and 260 kg, respectively.

and regarding the employed population it is generally acknowledged that the percentage of the agricultural population in the total employed population represents less than 20 percent in the developed countries, between 20 and 30 percent in the countries with average economic development and more than 30 percent in the developing countries.

According to the data of the World Bank, in 1977 the ratio between industry's percentage and agriculture's percentage in the gross national product was 9 to 1 in the industrialized nonsocialist countries as a whole, with it having the following size in the following countries: 5.3 in Italy, 8 in Austria, 7.4 in France, 8 in Japan, 4 in Finland, 6 in Australia, 7.7 in Canada* and so on. This ratio was 5 to 1 in the GDR and 3 to 1 in Czechoslovakia.

The continuation, on a higher level, of the policy of industrialization of Romania will raise industry's percentage in 1985 to 65 percent of national income and to nearly 70 percent of national product. If we also consider construction's percentage, then in 1985 the ratio between the percentage of industry and construction, taken together, and the percentage of agriculture will reach 5.8 to 1 in the case of national income and 7.2 to 1 in the case of national product. Along with this change, the percentage of the nonagricultural branches in the structure of the employed population will increase, with the agricultural population falling to nearly 22 percent in 1985, which will cause 9.4 inhabitants to correspond to 1 worker employed in agriculture in the middle of the next decade.

The decisive role in providing an industrial-type economy and especially in creating that great capacity to adapt and connect the country to the trends imparted by the scientific and technical revolution and to the demands of the world market belongs to the internal structure of industrial production, according to branches and especially according to subbranches and according to groups of products. Such a dynamic, highly technical structure provides for an increase in the degree of utilization of raw materials and entails a large volume of highly skilled labor and it permits an increase in the capacity to assimilate and propagate the latest gains of science and technology and an increase in the degree of participation of the country in international economic exchanges, thus contributing decisively to the growth of economic efficiency. Consequently, in the 1981-1985 period the growth of industry's contribution to the maintenance of the vitality of the Romanian economy and to the satisfaction of the requirements of our society is based on the accenting of the qualitative aspects of industrial development through the development of the peak branches at a high rate and the raising of the degree of technicality of all branches and through the intensification of the process of restructuring of industry as a result of the more marked development of the branches that are small consumers of energy and raw materials.

* "Rapport sur le Developpement Dans le Monde, 1979," p 147.

In order to give a more concrete expression to the changes that will occur in the process of the transition of Romania to the ranks of the countries with average development, we mention that, according to some calculations, in 1978 the percentage of the processing branches in the industrial production of the developed capitalist countries was over 88 percent (without power generation) and, within it, machine building achieved 37 percent of the industrial production of these countries, and the chemical industry and petroleum processing achieved 14 percent.*

In our country, machine building, which has the decisive role in the modernization of the technical-material base of the country, will constitute the branch with the most dynamic development, growing at an average annual rate of nearly 12 percent in the 1981-1985 period. Higher rates will occur in the electronics and electrical-engineering industries, machine-tool production and precision machinery, with the latter having to provide practically the entire need for hydraulic and pneumatic equipment, as well as the elements for the cybernation of all production. The production of highly complex technological equipment, with a high degree of automation, will be expanded, with its percentage in the general structure of machine building rising from 21.7 percent to 24.7 percent. The stronger connection of machine building to the attainment of the major objectives of the next five-year plan—the raising of the degree of automation and overall mechanization, the achievement of independence in the field of fuel and energy, the accenting of the industrial character of exports, and so on—finds its concretization in the growth of the production of mining equipment by a factor of over 3.4 and power equipment by a factor of over 3, in the organization of the production of nuclear machinery and equipment, in the expansion of the current production of helicopters, airplanes and engines, and in the growth of the production of automobiles, which will reach 280,000 per year, amounting to 118 per 10,000 inhabitants, as compared with 37 in 1978.

In addition, in the chemical industry there will be an increase in the rates of growth of the production of the highly technical products and groups of products that are achieved with low energy consumptions and better utilize the material resources incorporating a big quantity of highly skilled labor, such as the polymer industry, fine-synthesis and low-tonnage chemistry, and inorganic chemistry.

In this way, machine building and chemistry, having become basic branches of Romanian industry, are making a bigger and bigger contribution to the maintenance of the vitality of industry and, in general, of the whole national economy, with their contribution to the achievement of industrial production rising from 30 percent in the 1951-1965 period to over 50 percent in the 1966-1980 period and to 60 percent in the 1981-1985 period.

Important changes are occurring in the level of the quality and in the structure of the production of consumer goods, along with the growth of all

* MEMO, No 8, 1979, Supplement, p 16.

production at a steady rate, through the more marked growth of the production of durable goods. The assortment structure will include more and more high-quality products with a high use value.

The current stage of development of our country makes it possible and necessary to achieve a better balance between different branches and sectors of the national economy, on which the harmonious development of the whole economy depends. In this spirit, the development and modernization of agriculture are noted as one of the most important priorities of the five-year plan for 1981-1985, on which the very development of industry, of the whole national economy, and the raising of the well-being of the whole populace depend. The rational use of land resources, the concluding of the process of regionalization of crops and the establishment of crop rotations, the overall mechanization and the chemicalization of production, the complete modernization of pomicultural and viticultural holdings, the strong development of zootechny, and the radical resolution of the fodder problem will have to lie at the basis of the orientations that have to lead to the achievement of a profound agrarian revolution. A substantial increase in yields and in all agricultural production is projected on this basis, with Romania coming considerably closer to the developed countries in regard to the average production per hectare for some products.

Under the conditions of the contemporary scientific and technical revolution the technical and qualitative level of production and the intensity of the renovation and modernization of production constitute a leading component of the mode of development. Looking retrospectively, it can be said that the mere quantitative growth of industrial production would not have brought very many changes in the working and living conditions of the people, in the economic reality, if that great diversity of products with which we are now familiar had not appeared and if the list of products had not been renovated. In the postwar period in the developed countries and on the international market the demands for industrial products increased and the competitiveness promoted by means of the parameters of the products, technical ones that do not often prevail by means of their power over the prices, grew. According to the statistics published on an international level in the processing industry the cycle for the renovation of production is about 10 years, and in the branches more strongly under the influence of the contemporary scientific and revolution, where the annual rate of renovation is between 15-20 percent, the renovation cycle is 5-7 years.

Taking into account our economy's requirements and these trends on an international level, the directives of the 12th congress specify that in 1985 about 45 percent of the value of the production in the national processing industry will be obtained by means of the products that will be put into manufacture in the 1981-1985 five-year period. In machine building the proportion of new products will be over 70 percent. If we consider the fact that in the current five-year plan too the new and modernized products will represent about 44 percent, it means that industrial production will be renovated almost completely in the 1976-1985 decade, and in machine

building in 5-7 years, durations comparable to those achieved in some economically developed countries.

The decisive role in this regard goes to the development of scientific research and the promotion of technical progress. To this end, the funds earmarked for technological development and research will rise 50 percent in comparison with the current five-year period. It is significant that the percentage of the expenditures allocated from national income to research in the next five-year period will be similar to those in countries like Belgium, France, Italy, England and the FRG.*

In the view of our party, the transition of Romania to an average level of economic development has as an essential trait the achievement of higher economic efficiency, especially as bigger differences with regard to the economically developed countries are to be made up in this field. "It must be said," Comrade Nicolae Ceausescu pointed out in the speech given on the occasion of the 35th anniversary of the outbreak of the revolution for social and national liberation, "that, while for the basic products we have attained or in ensuing years will attain per capita levels comparable to those in the countries with a developed economy, the gaps are still relatively big for some qualitative, efficiency indicators—and we must do everything to eliminate them in as short a time as possible."

The increase in economic efficiency is based on extensive special measures and programs devoted to the more marked growth of the degree of utilization of raw materials and the quality of products, to the intensive utilization of production capacities and fixed assets, to the reduction of material expenditures and, in general, of production costs, and to the rational management of all resources. In the economy as a whole, the percentage of material expenditures in the national product will fall from 57.7 percent in 1980 to 55.5 percent in 1985, which will produce a significant rise in national income, if we consider the fact that the absolute value of a 1-percent reduction in the material expenditures in the national product will rise from about 14 billion lei at the end of the current five-year plan to 19 billion lei in 1985. In addition, the value of the net output per 1,000 lei of productive fixed assets will rise about 10 [?] lei in 1985, as compared with 1980, which will mean an increase of 40 billion lei in national income.

As a result, the process of improvement of some qualitative correlations in the economy will be accentuated. Thus, a 1.11-percent increase in net output will correspond to a 1-percent increase in gross output in industry, and in the economy as a whole, a 1.12-percent increase in national income will correspond to a 1-percent increase in national product. In addition, the correlations between the rates of growth of industrial production and the rates of growth of the production of electric power are changing substantially, with the respective coefficients going from 0.37 percent in the

* REVISTA ECONOMICA, No 47, 1979, p 9.

1961-1970 decade to 1.3 percent in the 1971-1980 decade and to 2-2.57 percent in the next decade.

The fulfillment of these provisions necessarily entails the continual improvement of the activity of management, organization and planning, the firm application of the new economic and financial mechanism in all sectors, of the principles of worker self-leadership, with the accent being put on the achievement of net output and physical output as basic indicators of the economic plan.

The work of erecting socialism and communism is being concretized in the qualitative improvement of the life of the people, the essence of the new order and the basic goal of the policy of the party. Consequently, the transformation of Romania into a socialist country with average development will mean, at the same time, qualitative changes in the working and living conditions of the population, the further growth of the material and spiritual well-being of the whole populace, the raising of the general level of civilization. As has been pointed out in the documents of our party, for a number of indicators of social development our country has already attained or has come closer to the level that some developed countries now have.

In this way, the transition of Romania to the ranks of the countries with average economic development is conceived as a process including extensive positive changes both in the technical-material base and in the structure of production, in the field of per capita national income and of economic efficiency, and in that of the living conditions of the people. By means of this, our economic growth has a strong social and human purpose, expresses the humanism of our society and constitutes a strong factor for affirming the new social order.

12105

CS0: 2700

NATIONAL BANK OFFICIAL DISCUSSES DECREES ON PRECIOUS METALS

Bucharest SCINTEIA in Romanian 28 Feb 80 p 2

[Article by Corneliu Carlan: "Regulations in the Interest Of the National Economy and of the Citizens"]

[Excerpts] The press of 27 February published the Council of State decree on the extraction and utilization of gold from alluvial sands and the Presidential Decree on prices for purchase from the population of gold, platinum and silver. These are normative acts with a profound economic significance, arising from concern for the national wealth and for increasing it, and they are intended to create the organizational framework for utilizing all resources of precious metals, for the purchase from the population, under mutually advantageous conditions, both for the citizens and for the state, of gold, platinum and silver. We asked Comrade Ion Dobrescu, vice president of the National Bank to explain the provisions of the new regulations.

As we know, the steady development of industry and of its peak branches presupposes the utilization of larger and larger quantities of precious metals for production purposes. For example, gold is an important raw material for electronic components of television sets, for other electronic household or industrial apparatuses, for medical apparatus, for the manufacture of various types of equipment for the chemical industry, the forestry economy and light industry. Platinum, because of its physical-chemical properties, is widely used in the manufacture of screens for the reactors of the large chemical fertilizer combines, for the manufacture of spinning nozzles, important parts of the equipment for the production of artificial and synthetic filters and for medical prostheses. Silver has a broad sphere of utilization in electronics and electrical engineering, in the manufacture of dental fillings, film and other material goods.

Therefore, it is in the interest of the development of industry, of the manufacture of a diversified range of electronic and electrical engineering goods for household use and for production, and of the providing of necessary materials for the protection of the health of man that the

national economy have increased quantities of these precious metals available. In addition, on the world level, increasing concern is being shown for assuring resources of precious metals, a fact which has been illustrated by the rapid increase in demands for such materials and, also, in their prices.

In this sense, the decree which regulates the methods of extraction and utilization of precious metals from alluvial sands has the purpose of stimulating the population to participate in the recovery of quantities of gold and silver which are found in the sands of the mountain rivers--pursuits which have old traditions in the ranks of the inhabitants of some zones of the country. Of the options created for the citizens, let us mention those referring to the possibility of involving pensioners in this activity. The incomes obtained do not affect their pensions and supplementary pensions. No taxes are levied on the incomes realized from the activity of extracting the utilizing the gold and silver by persons who have received authorization to do this. Authorized persons have the right to obtain the necessary information in regard to the quantity and quality of alluvial reserves in the area and to obtain, at cost, the equipment needed for exploitation. The conditions for obtaining the authorization--which require simple formalities--as well as the price and the means of payment for precious metals, the bonuses which will be given for special results obtained in the activity of extracting gold and silver from alluvial sands are stipulated in the regulation published in the press.

In connection with the Decree on prices for purchase of gold, platinum and silver from the population, it should be emphasized that its provisions offer citizens the certitude of the correct evaluation of the precious metal content in the metals which are offered for sale and of their incorporation, in accordance with their complexity, in the increased prices set for jewelers. Of course, citizens who desire to sell a precious metal will appreciate this purchase system, the only legal system, which protects them from the troubles and the illegalities of transactions for speculative purposes, carried out by unauthorized persons.

The decree stipulates that a bonus (agio) above the value of the gold content is to be paid for gold coins. Why this provision? Because on the international market, some coins, because of their numismatic value (that is, the value given to their age, rarity, execution, and to commemorative issues), are sold at prices higher than those of the precious metal of which they are made.

A new element in the current regulations deals with the possibility of obtaining foreign currency for 10 percent of the price of the gold and platinum sold to the state. This currency, kept in personal accounts in the Romanian Foreign Trade Bank or the National Bank, can be used in the country for the purchase of goods and the payment of services with prices or taxes in hard currency and also abroad--for tourist travel, for the payment of subscriptions to specialized reviews, for the purchase of medicine,

etc. It should be specified that in regard to precious metals sold under the conditions of the decree, the citizens do not have to prove their origin with documents.

Concretely, which units will be buying precious metals from the citizens? The purchase of gold and platinum jewelry, with a special level of processing, for which a high price has been paid, will be carried out by the state trade units specializing in the sale to the population of objects and jewelry of precious metals, units which up to now have had the task of carrying out operations of purchases from the citizens. Gold coins, simple jewelry, as well as other precious metals under other forms are purchased by National Bank units situated in the localities which are county seats. In Bucharest, the National Bank unit which carries on this activity is located at No 16 Strada Lipscani.

CSO: 2700

SOLUTIONS TO AGROINDUSTRIAL COUNCIL DIFFICULTIES

Bucharest REVISTA ECONOMICA in Romanian No 50, 14 Dec 79 pp 1-11

[Article by Prof V.V. Topor]

[Text] At the beginning of this year, the creation of uniform state and cooperative agroindustrial councils unquestionably inaugurated a new and qualitatively superior stage in the improved organization of agriculture, and in achieving a structural balance for our entire national economy. The new organization of agriculture is based on objective requirements for optimizing social values through a more complete utilization of the human and material resources available in our country, greater stress on material production, continued reduction in costs, and higher efficiency.

The formation of agroindustrial councils in agriculture following the creation of centrals in industry and other sectors of the economy, achieves in principle a uniform structure for the national system of organization and management of production, while of course respecting the specific aspects of agricultural work.

As Nicolae Ceausescu pointed out in his report to the 12th Congress: "A particularly important role in the new organization of agriculture has been assigned to the uniform state and cooperative agroindustrial councils, whose duty is to assure the concentration and specialization of production, the efficient use of land resources, material and financial means, and manpower, as well as the economic strength of each component unit."

As in the case of industrial centrals, agroindustrial councils are composed of several economic units (agricultural, agroindustrial, construction, trade, and so on), to which are added units for education, scientific research, and others. And just as in the case of industrial centrals, agroindustrial councils are intended to be autonomous economic units for production, based on economic self-management, and holding the status of legal entities, but organized solely on the criterion of territorial legal entities, but organized solely on the criterion of territorial proximity of component units. Still as in the case of industrial centrals, agroindustrial councils are centered around the structure of one enterprise, which in their case is the agricultural mechanization station.

It is true that other similarities can be found between the organizational concepts of these two types of complex economic units, but it is no less true that there also exist some differences, which raise special problems that must be properly solved in order for operations to proceed strictly as planned.

One of the most important difference is that agroindustrial councils include not only agricultural units which manufacture finished consumption products, but also industrial units which process agricultural raw materials, a characteristic which is only exceptionally found in the case of industrial centrals. It was natural that this approach be adopted for agroindustrial councils, insofar as it can and must efficiently solve not only the economic problems of the rural environment, but also the social problems of an active population which has to live in this environment in numbers and ratios determined by the requirements of a balanced development between urban and rural areas.

Another difference arises in the ownership of agroindustrial council units, since some of them are state agricultural units while others are cooperatives. The inclusion of agricultural enterprises based on different forms of ownership in a single coordinating economic organism is without doubt an efficient means for eliminating economic and production disparities between state and cooperative units, by raising the economic and organizational level of the latter to that of the former, as well as a more effective and uniform method for using the material and human resources included in the territories of agroindustrial councils. Similarly serious is the possibility that sooner or later this will also eliminate the differences which still persist between the two forms of ownership in agriculture.

Given the fact that the organizational improvement of agriculture as a result of the creation of agroindustrial councils is recent, and that it will involve a constant process for solving the many problems which will arise, we will delve on some practical approaches and features which in our opinion could prevent or eliminate existing or future difficulties. This will create more favorable conditions for assuring a high efficiency for this new form of structural organization of agriculture.

Requirements for Organization Along Industrial Lines

According to their statute, agroindustrial councils are plan assignees, exercising planning functions over the overall economic activity of their subordinated agricultural units. Despite this, and contrary to industrial centrals--which are charged with the exercise of this function in a unified manner and which establish plan tasks only for state enterprises--agroindustrial councils exercise these functions and establish plan tasks not only for state agricultural enterprises, but for cooperatives as well. This essential point leads to different methods for solving planning problems, that take into consideration the differences created by different ownerships. We thus believe that an increased participation of cooperatives in meeting the social need for agricultural products must be obtained primarily by vesting their economic interests in this process. It is also indispensable that economic self-management be totally integrated with the plan, since otherwise--as experience

has shown--either the plan or the economic self-management would be merely a formality. The coordination of self-management with the plan can justifiably be considered as a fundamental criterion for improving the system of economic organization and management both locally and nationally.

Once plans have been formulated and approved, it is obligatory that their execution be supervised by the councils, assuring the scheduled and complete fulfillment of all assigned tasks, both within the council and for each component unit, and seeking effective solutions for all problems that arise during the execution of operations for vegetal and animal production, as well as of operations in the agricultural food industry. In this respect, we might point out that there still exist many areas which need to be improved in the effective organization and management of agricultural operations. Whereas industrial enterprises, whose technical processes are conducted over relatively small areas, make use of dispatching services equipped with the necessary communications technology, agricultural enterprises--with very rare exceptions--have no such services, even though their production processes are conducted over large expanses, areas which are now even larger as a result of the introduction of agroindustrial councils. The possibilities for installing dispatching services in state and cooperative agricultural enterprises should be investigated; these services could be connected to a central dispatching point for a given council, where the available communications would make it possible to effectively follow operations, and would enable prompt and organized interventions. It is obvious that operational planning must also be the object of methodological improvements, going as far as the formulation of programs written with the use of computers.

In the organization of production, agroindustrial councils have extensive functions in the organization and rational utilization of land resources, and in the organization of agricultural production for uniform planting and technologies. But this function cannot always be fully exercised under the conditions of two forms of agricultural ownership and of the interests of the respective units, which are not always congruent. That is why it is important to adopt solutions which will vest the interests of both categories of agricultural units.

As to the creation of single-crop fields within any given councils, we believe that the problem is much too complex for standardized solutions to be adopted. The accelerated introduction of technologic progress in agriculture, and in particular the expansion of mechanization for technologic processes, naturally also imposes an expansion of the area of utilization of the respective technical resources. But this extension has limits, determined by the effects of large scale economics. Even if crops are planted in areas that are increased to 1000 ha, as has recently been recommended, the effective utilization of technical resources will still involve the magnitude of work areas, whose dimensions cannot exceed the technologic limits which assure optimum quality and economic efficiency for the operations that are being performed. The inevitable result of increasing the areas covered by given crop, up to some limit to be sure, is to increase the economic efficiency of the use of resources, but does not represent an essential specific approach

for increasing the size of the crop. Moreover, it is possible in practice for the savings achieved through the organization of large fields, in terms of reduced energy consumptions, to be cancelled by the negative effect of the poorer quality work carried out over an excessively large area. This does not mean that we do not agree with a more rational organization of crop planting, but rather that we are solely against the excesses that can occur in this domain, especially since the acceptance of single-crop fields by cooperative members will depend strongly on the advantages that they will derive from it, both for their units and for themselves.

This problem is equally valid for the domain of agricultural production specialization and structuring within a given council's territory, capable of resulting in a more judicious placement of production branches for the council. But the application of this option will have positive results only by using specific economic leverages which will vest the interests of agricultural units in fulfilling the goals that are established. This task was also included in the statutes of the former intercooperative councils, without obtaining satisfactory results in all cases. It is quite clear that production activities cannot be redistributed without corresponding financial compensations from society.

Party documents stipulate that the Department for the Industrialization of Agricultural Products will organize cooperation and association actions with agroindustrial councils, to develop sections within agricultural enterprises. But it remains to be seen what financial means will be used to solve this problem; it is well known that investment funds designed to create new production capabilities are created within industrial centrals from the state budget. So far, it has not yet been stipulated whether agroindustrial councils will also benefit from such funds for these purposes. If agricultural cooperatives will receive credits to these ends, they will probably prefer to create their own installations for the industrialization of agricultural products, and it is for this reason that express provisions must be made to establish that the credits be devoted exclusively to participation in the creation of new production capabilities which will be administrated jointly by agroindustrial councils.

It must be agreed that the improvements anticipated for the economic situation of cooperatives as a result of their inclusion into agroindustrial councils, can be achieved only if the expanded industrialization of agricultural products will enable cooperatives to obtain incomes from labor comparable to those of other sectors of the national economy. Otherwise, even if cooperative members continue to live in a rural environment, they will increasingly orient themselves toward other occupations than agriculture.

Decisive Factor: Quality of Work

The creation of agroindustrial councils is the time to place the foundations of a new policy toward manpower in agriculture, and in particular the manpower in the cooperative sector. The continued improvement in the standard

of living of cooperative members is determined by a more rapid improvement in labor productivity. In order to assure cooperative members with an annual income close to the average level achieved in the economy, each cooperative member will have to be assigned an area of 10-15 ha, which is 2-3 times more than is currently being allotted. Only when this basis is assured, will it be possible to create conditions for the active and permanent participation of these cooperative members who will work exclusively in agriculture. At the same time, it is necessary to also be aware of the quality of the manpower which will remain in agricultural cooperatives, taking steps to assure a normal structure in terms of ages and sexes.

The creation of agroindustrial councils must be the occasion for beginning a definite process of establishing a permanent work force in cooperatives, primarily from among those who work at least 100-150 days per year. It will be necessary to accurately project the total agricultural cooperative manpower needs, and to determine the size of the permanent work force and the number of temporary workers recruited from families which are only partially engaged in agriculture. It will also become necessary at this time to modify statutory provisions regarding personal lots, in terms of correlating their size to the degree of participation of cooperative members in cooperative production activities and to the size of their respective families.

In order to attain all the established goals, agroindustrial councils will soon have to exercise all the attributes conferred upon economic units based on economic self-management. To this end, agroindustrial councils, just as industrial centrals, will have to be endowed with the means of production needed to conduct their own activities. To begin with, they must totally take over the tasks and resources of agricultural mechanization stations, have at their disposal their own investment funds, and gradually create their own (or in collaboration with state and cooperative agricultural units) agricultural and industrial units, whose aims will be the production of seed varieties and animal breeds capable of improving the means of production of their component agricultural units, and of assuring new processing capabilities for the materials supplied by agricultural units. The councils' integrated production processes must also be accompanied by appropriate facilities for the storage and distribution of finished goods.

In particular, we are concerned with the allocation of significant state-assisted investments to all agricultural units, in order to completely avoid losses of products caused by the extreme centralization of transportation and storage operations in silos and enterprises for the industrialization of agricultural products. It has been calculated that a loss of only 1 percent of the 1978 production is equivalent to about 400-500 million lei.

Investments of 1-2 billion lei in the construction of storage facilities in agricultural units would be recovered in 2-4 years. Moreover, some losses could also be avoided by introducing a simpler method for receiving and distributing vegetables, fruits, and grapes in production agricultural enterprises. The councils must direct a portion of the products for local sales, meaning all those amounts which exceed the strictly necessary quantities for redistribution to various regions of the country. For all these tasks, agroindustrial councils need resources and a sufficient number of capable personnel, competence in the organization of their activities, and the firm will to radically attain a higher quality in all their agricultural activities.

CONSUMER SATISFACTION WITH HOUSEHOLD APPLIANCES STUDIED

Bucharest REVISTA ECONOMICA in Romanian No 50, 14 Dec 79 pp 13-14

[Article by Dr Ioan Georgescu: "Modernization and Diversification in the Production of Electrical Appliances -- Intensive Factors for Increasing Consumption"]

[Text] One of the objectives of current concern for socialist economic theory and practice is the formulation of a consumption model appropriate for the goals of our socialist order, and for its profoundly humanistic aims to create for each member of society, the socioeconomic, material, and cultural conditions necessary for his multilateral development.

The documents adopted by the 12th Party Congress, and in particular the Guideline Program for Improving the Standard of Living During the 1981-1985 Period and for Continued Improvements in the Quality of Life, remain focused on man and his needs, and on the best satisfaction of the requirements of all members of our society, consistent with a fundamentally scientific consumption. The contribution that economic research can make to the formation of a scientifically based consumption model, appropriate for our order and diametrically opposed to that of a consumer society, consists of identifying the elements necessary for the dynamic planning of a consumption structure that, given the resources which society can allocate for this purpose at any given time, will best satisfy the needs of the population.

In addition to the long term growth of the accumulation-consumption ratio, which determines the quantitative aspect of consumption, another factor that can contribute to the fulfillment of the fundamental goal of socialism, is the efficient utilization of the resources allocated to the production of consumer goods and to new investments in this sector. It must be pointed out that the progress recorded in the structure of the consumption model, in favor of higher quality products which reflect a high labor productivity in manufacture, is in itself a means for an additional increase in consumption.

This illustrates the important role of industry and commerce, and of using a well founded structure of supply to orient the consumption of the population toward high quality, lasting, and functional consumer goods, manufactured according to modern designs and techniques as supplementary, intensive factors for improving the standard of living.

In practice, this means that every worker has a greater ability to buy with his income a wider variety of consumer goods, with a lower frequency of replacement of these goods due to poor reliability, concurrent with the possibility of acquiring these goods at increasingly accessible prices resulting from higher labor productivity and a more judicious utilization of materials. At the same time, a profitable, efficient production of consumer goods throughout the national economy means the assurance of a solid base for an expanded socialist production of such items at a rate which matches technical and scientific progress, while achieving significant savings of raw materials, energy, and social labor.

The analysis of a single sector of consumer goods production -- that of electrical appliances -- illustrates the existence of many ways and means which converge on the achievement -- from any given resources -- of a new quality in satisfying the needs of the population.

Some of the major directions which we propose to analyze below are: joint efforts for technologic renewal of products in enterprises, such as marketing research, value analysis, and design; higher sensitivity of sales price to product quality; better technical and production creativity through effective organizational structures.

Real Consumer Needs

One expression of the interest in modernizing and diversifying the production of electric appliances is the Program for the Production and Distribution of Electric Appliances During the 1976-1980 Period, which at the time of its formulation was a realistic forecast for the orientation of an important sector of consumer goods productions in the machine building industry, the light industry, and cooperatives. A recent review of this program in the light of the international prices of energy, and of technologic progress in the last few years, has imposed some restructuring of the technical specifications of these products: for instance, the minimum allowable thermal efficiency of electric appliances used for food preparation will be 0.7; heating elements with ceramic beads will be replaced with cemented heating discs, whose thermal efficiency is higher; the operation of some appliances will be thermostat controlled; static heaters will be replaced with dynamic ones; and so on. At the same time, some appliances which were becoming outdated on the world market have been eliminated, while the list of products has been enriched with a number of new products which were not initially included in the program, but which proved their viability on the domestic and foreign markets. For some products, such as pressure cookers, which save large amounts of power in households but whose domestic production cannot be justified, the alternative of importation can be considered for some time to come. The need for market testing before the introduction of a new product into fabrication, can be exemplified by the launching of a new type of household mini-appliance which was not in great demand by consumers. These are just some of the decisions reached in the development of this sector and based on market information. The continued growth in the population's ownership of electric

Population's ownership of electric appliances.

Product	1955	1965	1975	1980	1985	1985/1980 index
Radios	37.4	123.9	206.6	247	300	121.5
Television sets	--	28.8	144.9	203	245	120.7
Refrigerators	0.4	21.3	94.5	157	220	140.1
Washing machines	0.5	22.9	67.9	100	153	153.0
Vacuum cleaners	0.6	11.6	34.2	5.02	--	---

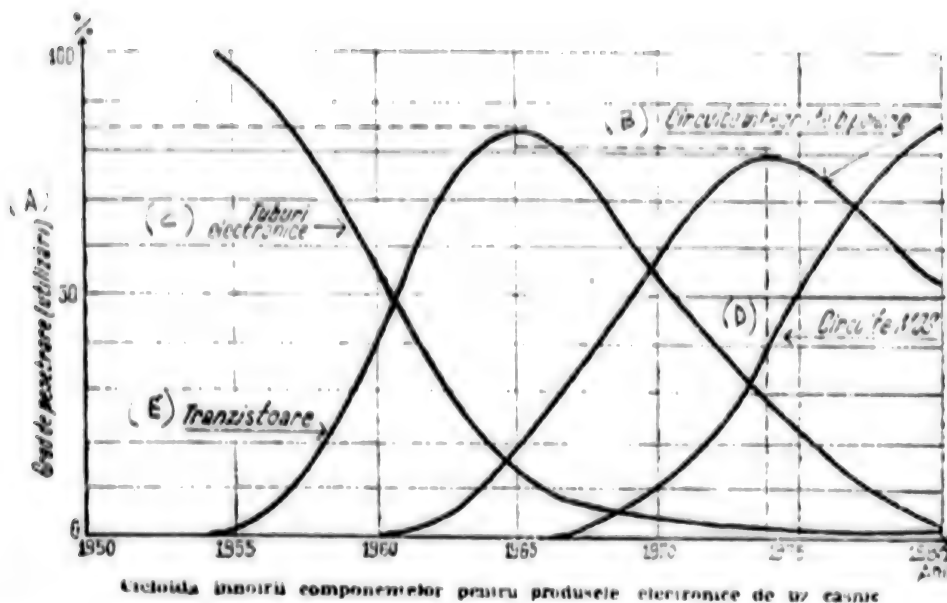
Source: "Guideline Program for Improving the Standard of Living During the 1981-1985 Period and for Continued Improvement of the Quality of Life," Editura Politica, Bucharest 1979; SCINTEIA, 13 June 1978.

appliances (see table) means that an increasing portion of the demand is gradually changing from first ownership to replacements, which also indicates that consumers are becoming considerably more demanding.

Under these conditions, delays in the introduction of such products as programmed washing machines, mono and stereo record players, oscillating fans, wand and automobile vacuum cleaners, cassette radios, freezers and refrigerators (three-shelves), roller mangles, cause situations in which the rate of renewal of appliances owned by the population does not reflect the real potential of the domestic market. At the same time, persistent production of some appliances for which the market appears to be saturated, creates problems both for producers and for commerce.

In order to involve consumers as extensively as possible in the decisions for production modernization, it would be useful for producers to systematically consult consumer representatives; councils formed in counties and cities, which would operate as actual opinion poll panels.

Because it is becoming increasingly difficult to obtain on foreign markets some of the raw materials needed to produce electric appliances, (iron, non-ferrous metals, and so on), it is becoming particularly important to use value analyses for the largest number of such products, so as to optimize all their functions and materials requirements (weight reduction, introduction of substitutes, and so on), and to consequently increase the economic efficiency of production as well as to satisfy the demand of the population.



Component renewal cycles for household electronic products.

- Key:
- (A) Degree of penetration (utilization)
 - (B) Bipolar integrated circuits
 - (C) Electronic tubes
 - (D) MOS circuits
 - (E) Transistors

Together with motivational field studies regarding intentions of buying such products, the need is becoming increasingly clear for the intervention of design specialists -- along with engineers -- in the planning of electric appliances. The role of designers grows as the market changes from a primary demand for first ownership, to the satisfaction of a selective and increasingly demanding need. The additional feature offered by design is the integrating point of view regarding the type of objects in which the product belongs, its balanced integration into the surroundings, and the solution of the increasingly stressful man-machine conflict through a concern for a humanization of the environment. It is generally accepted today that the need for design intervention in product planning grows as the product is more directly intended for human usage.

A positive example of the real contribution which design can make in improving the conception of electric appliances, is offered by the Industrial Central for Electronics, which having conducted some preliminary trials in the planning of modern television enclosures together with the design section of the Nicolae Grigorescu Institute for the Plastic Arts, found it necessary to hire as permanent employees, some graduates of the institute who could remodel the central's products on the basis of design principles.

In conclusion, we can say that the decision to produce and deliver durable goods to the population -- goods characterized by their value, their usefulness, their design lines which attenuate the aggressivity of "machinery" that man generally shies away from, their servicing, the availability of spare parts, and their integrated appearance (range and refrigerator kitchen sets, for instance) -- imposes the foundation of modernization policies on multidisciplinary studies.

Dependence of Prices on Quality

Price policy proves to be the economic leverage which best determines the life cycle of a product, thus influencing a recurring process of renewal (see figure for renewal cycles).

Beginning with the definition of a quality standard for a product, the different categories of quality must be differentiated by appropriate differences in prices. In order to demonstrate respect for consumers, approvals for deviations from standards must be accompanied by corresponding reduction in prices, proportional to the reduction in quality caused by the deviation from the standard.

An active standards policy which periodically reviews and updates parameters to the levels found on the world market, will correspondingly generate an active price policy.

In the case of products whose standards provide only one level of quality -- such as in the case of electric appliances -- price differences can be established by comparing the technologic level of the product to those on the world market, with positive or negative differentials being determined by the positive or negative deviations from international standards. This also automatically leads to a greater concern for eliminating outdated products from the manufacturing process.

The proper use of the powerful instrument represented by standards, for stimulating technologic progress and for improving the quality of products, together with the factors analyzed in the earlier paragraphs, contributes to reduce raw materials and energy consumption, unify and standardize product subassemblies, and eliminate all unnecessary elements, thereby increasing production efficiency. That is why we may consider the possibility of stimulating an active standardization policy through the intermediary of prices that are sensitive to the quality of products manufactured according to updated standards. The correlation of standards modifications and price changes will be a determining factor for the effective operation of this economic leverage.

High-Performance Structures

A third factor, essential for increasing the design and manufacturing efficiency of consumer goods, is to increase the concern for organizing this production within branches.

An analysis of the manner in which electric appliances are presently being produced, shows that this production is scattered among several ministries and central organizations: about 80 percent in the machine building industry, 5 percent in the light industry, and the rest in cooperatives and other economic units. This naturally raises the problem of specialization and orientation in the production of consumer goods. The difficulty of supervising and coordinating this sector is worsened by the fact that the majority of units of the major supplier -- machine construction -- do not specialize in the fabrication of these consumer goods, which do not constitute basic products in the manufacturing inventory of the respective enterprises.

As was shown by a recent analysis conducted by the Council for Coordinating the Production of Consumer Goods, the dispersion of concerns and responsibilities among these units leads to difficulties in assuring the necessary capabilities for product design, and for the planning and construction of tooling, devices, and testing equipment, thereby slowing down the rate of production modernization.

For instance, the fact that durable goods are among the highest priced products in the light industry while they have the lowest values in the machine construction industry, results in a corresponding degree of interest for these products in design and production.

Given the specific nature of the production and destination of these products (for market demand and not for technical and material supply), we believe that it would be opportune to specialize in distinct units with exclusive responsibilities, both the design and the production of this group of consumer goods; this measure, as we are showing here, would be likely to increase the economic efficiency of this sector and thereby intensively increase consumption, without requiring new resources.

Just as the requirements of production for exportation called for the specialization of exporting units, the fulfillment of our order's fundamental goal -- the best satisfaction of the population's needs -- justifies the introduction of such measures for the improved organization of consumer goods production. This would open the possibility for greater concern for design promotion and value analysis in the planning of consumer transformation ratios in appliances, and for greater use of solar and hydraulic power for household uses, concerns which would also have a favorable effect on exportation potentials in this sector.

In order to intensify cooperation within the machine building ministry, it is important to devote greater interest to the introduction and production of electric appliances with all types of necessary thermostats, automation, and programming devices, as well as the assimilation of technologies for the production of the necessary volume of cemented discs.

A decisive contribution to the completion of the special program can be made by the metallurgical and chemical industries, in assuring the necessary materials for electric appliances.

DATA ON FORMS OF FARM ASSOCIATIONS

Belgrade GLASNIK POLJOPRIVREDNE PROIZVODNJE, PRERADE I PLASMANA in Serbo-Croatian No 1, Jan 80 p 8

[Text] Facts About Association of Farmers, Beginning of 1979

b) Područje	g) Broj organizacija					h) Broj udruženih zemljoradnika	i) Broj penzijski osiguranih zemljoradnika	j) Broj kooperanata
	c) Zemljoradničke zadruge	d) Osnovne zadružne organizacije	e) Osnovne organizacije kooperanata	f) RO kooperanata	g) OOURs za kooperaciju			
k) B i H ¹	27	34	149	6	61	24.795	—	94.312
l) Crna Gora ²	8	—	5	1	13	410	—	15.900
m) Hrvatska ³	212	12	6	1	98	39.799	166	184.895
n) Makedonija ⁴	83	—	19	—	—	8.000	—	100.000
o) Slovenija ⁵	43	62	22	1	—	46.586	8.170	—
p) Srbija ⁶	123	56	179	8	131	76.126	9.814	—
q) Vojvodina ⁷	—	—	—	—	270	45.000	618	—
r) Kosovo ⁸	18	12	15	—	7	7.209	—	—
SFRJ ⁹	514	176	395	17	580	247.923	18.768	—

- 1) ZS [Statistical Office] Bosnia-Hercegovina: Status 30 June 1979
- 2) ZS Montenegro: Data on the status as of 30 June 1979. Number of cooperators end of 1978
- 3) ZS Croatia: Data on status 30 June 1979. OOURs for cooperation are in process of transformation into basic organizations of cooperators.
- 4) ZS Macedonia: Data on status 30 June 1979
- 5) ZS Slovenia: 6th Regular Main Assembly, p 14, May 1979; data as of 31 Dec 78, Aug 79 on the number of associated farmers.
- 6) ZS Serbia: Report for 1978, [dated] June 1979.
- 7) ZS Vojvodina: Analysis of status, March 1979. All OOURs for cooperation are in process of transformation into basic organizations of cooperators (OOK). According to data given to the presidium of the Yugoslav Statistical Office, there were 265 OOKs and 5 work organizations of cooperators in Vojvodina in October 1979.
- 8) ZS Kosovo: Data on status the end of 1978.
- 9) In the total for the SFRY data on the number of cooperators is incomplete.

Key:

- a. Number of organizations
- b. Area
- c. Farm cooperatives

- d. Basic cooperative organizations
- e. Basic organizations of cooperators [private farmers cooperating with cooperatives]
- f. Work organizations of cooperators
- g. Basic organizations of associated work for cooperation
- h. Number of associated farmers
- i. Number of farmers with pensions
- j. Number of cooperators
- k. Bosnia-Hercegovina
- l. Montenegro
- m. Croatia
- n. Macedonia
- o. Slovenia
- p. Serbia
- q. Vojvodina
- r. Kosovo

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EASTERN EUROPE SERIAL REPORTS

EAST EUROPE REPORT: Economic and Industrial Affairs
EAST EUROPE REPORT: Political, Sociological and Military Affairs
EAST EUROPE REPORT: Scientific Affairs

WORLDWIDE SERIAL REPORTS

WORLDWIDE REPORT: Environmental Quality
WORLDWIDE REPORT: Epidemiology
WORLDWIDE REPORT: Law of the Sea
WORLDWIDE REPORT: Nuclear Development and Proliferation
WORLDWIDE REPORT: Telecommunications Policy, Research and Development

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